ORIGINAL



1	BEFORE THE ARIZONA CO	RPORATION Communication
2	COMMISSIONERS GARY PIERCE - Chairman BOB STUMP	Arizona Corporation Commission  DOCKETED
3	SANDRA D. KENNEDY PAUL NEWMAN	MAY 0 7 2012
4	BRENDA BURNS	DOCKETED BY
5		7/11.
6 7	IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, FOR A	DOCKET NO. W-01445A-11-0310
8 9 10	DETERMINATION OF THE FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR UTILITY SERVICE FURNISHED BY ITS EASTERN GROUP AND FOR CERTAIN RELATED APPROVALS.	STAFF'S NOTICE OF FILING SURREBUTTAL TESTIMONY
11		
12	The Utilities Division ("Staff") of the A	rizona Corporation Commission ("Commission")
13	hereby files the Surrebuttal Testimony of Staff wi	tnesses John A. Cassidy, Katrin Stukov, Jeffrey M.
14	Michlik and D. Bentley Erdwurm in the above-refe	erenced matter.
15	RESPECTFULLY SUBMITTED this 7 <sup>th</sup> d	ay of May, 2012.
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18	<u>/</u> _	ned out of
19	/ W	ridget A. Humphrey, Staff Attorney Vesley C. Van Cleve, Staff Attorney egal Division
20	A	rizona Corporation Commission 200 West Washington Street
21	P	hoenix, Arizona 85007 502) 542-3402
22	(4	, oa) 5 12 5 19 5
23		7071400 177000
24	Original and thirteen (13) copies of the foregoing were filed this	DOCKET CONTROL  NOTE: The state of the state
25	7 <sup>th</sup> day of May, 2012 with:	LS & C L - YAM SIOS
<ul><li>26</li><li>27</li></ul>	Docket Control Arizona Corporation Commission 1200 West Washington Street Phoenix, Arizona 85007	ECEINED

1	Copies of the foregoing were mailed
2	this 7 <sup>th</sup> day of May, 2012 to:
3	Steven A. Hirsch Stanley B. Lutz
4	BRYAN CAVE, LLP Two North Central Avenue, Suite 2200
5	Phoenix, Arizona 85004-4406 Attorneys for Arizona Water Company
6	Robert Geake
7	Vice President and General Counsel ARIZONA WATER COMPANY
8	P.O. Box 29006 Phoenix, Arizona 85038
9	Daniel W. Pozefsky
10	Chief Counsel RESIDENTIAL UTILITY CONSUMER OFFICE
11	1110 West Washington Street, Suite 220 Phoenix, Arizona 85007
12	Kathie Wyatt
13	1940 N. Monterey Dr. Apache Junction, Arizona 85120
14	11.11 G/ C
15	Ushley Hoose
16	O
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# BEFORE THE ARIZONA CORPORATION COMMISSION

GARY PIERCE
Chairman
BOB STUMP
Commissioner
SANDRA D. KENNEDY
Commissioner
PAUL NEWMAN
Commissioner
BRENDA BURNS
Commissioner

IN THE MATTER OF THE APPLICATION OF	)	DOCKET NO. W-01445A-11-0310
ARIZONA WATER COMPANY, AN	)	
ARIZONA CORPORATION, FOR A	)	
DETERMINATION OF THE CURRENT FAIR	)	
VALUE OF ITS UTILITY PLANT AND	)	
PROPERTY AND FOR ADJUSTMENTS TO ITS	)	
RATES AND CHARGES FOR UTILITY	)	
SERVICE FURNISHED BY ITS EASTERN	)	
GROUP AND FOR CERTAIN RELATED	)	
APPROVALS.	)	

SURREBUTTAL TESTIMONY

OF

JOHN A. CASSIDY

PUBLIC UTILITIES CONSULANT

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

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# EXECUTIVE SUMMARY ARIZONA WATER COMPANY EASTERN GROUP DOCKET NO. W-01445A-11-0310

The Surrebuttal testimony of Staff witness John A. Cassidy addresses the following issues:

<u>Capital Structure</u> – Staff continues to recommend that the Commission adopt a capital structure for Arizona Water Company ("Company") for this proceeding consisting of 49.0 percent debt and 51.0 percent equity.

Cost of Equity – Staff recommends that the Commission adopt a 9.4 percent return on equity ("ROE") for the Company. Staff's estimated ROE for the Company is based on the average of its DCF and CAPM cost of equity methodology estimates for the sample companies ranging from 9.0 percent for the discounted cash flow method ("DCF") to 9.7 percent for the capital asset pricing model ("CAPM").

Overall Rate of Return – Staff recommends that the Commission adopt an 8.1 percent overall rate of return.

<u>Dr. Zepp's Testimony</u> – The Commission should reject the Company's proposed 12.50 percent ROE for the following reasons:

Dr. Zepp's primary and secondary DCF models use average stock prices to calculate the current dividend yield, his primary DCF estimates rely exclusively on analysts' forecasts for earnings per share growth, his secondary DCF estimates fail to consider historical dividend per share growth and are based, in part, on historical average share price appreciation. Dr. Zepp's CAPM and risk premium estimates utilize a forecasted risk-free rate.

Ms. Ahern's Rebuttal Testimony – The Commission should reject the Company's proposed 12.50 percent ROE for the following reasons:

Ms. Ahern's testimony contravenes the metrics used by Dr. Zepp and implies that his estimate of the Company's cost of equity is overstated by 159 basis points.

Direct Testimony of John A Cassidy Docket No. W-01445A-11-0310 Page 1

1

## INTRODUCTION I.

2

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A.

Please state your name, occupation, and business address. Q. My name is John A. Cassidy. I am a Public Utilities Consultant employed by the Arizona

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# Are you the same John A. Cassidy who filed Direct Testimony in this case? Q.

address is 1200 West Washington Street, Phoenix, Arizona 85007.

Yes, I am. A.

## What is the purpose of your Surrebuttal Testimony in this rate proceeding? Q.

A. The purpose of my Surrebuttal Testimony is to report on Staff's updated cost of capital analysis with its recommendations regarding Arizona Water Company's ("Arizona Water" or "Company") cost of capital, and to respond to the cost of capital Rebuttal Testimony of Company witnesses Dr. Thomas M. Zepp ("Dr. Zepp's Rebuttal") and Ms. Pauline M. Ahern (Ms. Ahern's Rebuttal").

Corporation Commission ("Commission") in the Utilities Division ("Staff"). My business

Please explain how Staff's Surrebuttal Testimony is organized. Q.

Staff's Surrebuttal Testimony is presented in four sections. Section I is this introduction. A. Section II discusses Staff's updated cost of capital analysis. Section III presents Staff's comments on the Rebuttal testimony of the Company's two cost of capital witnesses; beginning with Ms. Ahern's Rebuttal, followed by Dr. Zepp's Rebuttal. Lastly, Section IV presents Staff's recommendations.

Direct Testimony of John A Cassidy Docket No. W-01445A-11-0310 Page 2

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II. COST OF EQUITY AND OVERALL RATE OF RETURN 1 2 Has Staff updated its analysis concerning the Company's cost of equity ("COE") Q. 3 since filing Direct Testimony in this proceeding? 4 Yes. Staff updated its analysis to include the most recent market data available. A. 5 6 Q. What is Staff's updated COE? 7 Staff's updated COE is 9.4 percent. In Staff's Direct Testimony, the COE had been 9.1 A. 8 percent. 9 What COE is Staff recommending for Arizona Water? 10 Q. Staff is recommending a COE of 9.4 percent derived from its updated cost of equity 11 A. estimates that range of 9.00 percent for the discounted cash flow ("DCF") method and 9.7 12 13 percent for the capital asset pricing model ("CAPM") estimation methodologies. 14 Did Staff update its analysis concerning the Applicant's overall rate of return? 15 Q. 16 Yes, the updated analysis is supported by Surrebuttal Schedules JAC-1 to JAC-9. A. 17 What is Staff's updated overall rate of return? 18 Q. Staff's updated overall rate of return is 8.1 percent, an increase from 7.9 percent in direct 19 A. testimony. 20 21 What overall rate of return is Staff recommending for Arizona Water? 22 Q. 23 A. Staff recommends an 8.1 percent overall rate of return. Staff's recommendation is based 24 on a COE of 9.4 percent, a cost of debt of 6.8 percent and a capital structure consisting of 51.0 percent equity and 49.0 percent debt, as shown in Surrebuttal Schedule JAC-1. 25

# III. STAFF RESPONSE TO THE REBUTTAL TESTIMONY OF THE COMPANY'S COST OF CAPITAL WITNESSES

Ms. Ahern's Rebuttal

- Q. In her Rebuttal Testimony, does Ms. Ahern present a cost of equity calculation utilizing a risk premium model?
- A. Yes. For each water utility included in Staff's proxy group of companies, Ms. Ahern calculates the cost of equity utilizing the Predictive Risk Premium Model ("PRPM"). The results of Ms. Ahern's PRPM risk premium analysis are presented in Exhibit PMA-11.

- Q. What is Ms. Ahern's stated purpose for making such a cost of equity calculation?
- A. Ms. Ahern's stated purpose is to demonstrate the inadequacy of both Staff's recommended 9.1 percent ROE, and RUCO's recommended 9.3 percent ROE for the Company (see Ahern.Rebuttal, p. 33, lines 1-2).

- Q. Does Ms. Ahern consider Dr. Zepp's recommended 12.5 percent cost of equity for Arizona Water to be reasonable?
- A. Yes. In the narrative of her testimony, Ms. Ahern characterizes Dr. Zepp's recommended 12.5 percent ROE as being "reasonable, if not conservative" (see Ahern Rebuttal, p.30, lines 23-24).

- Q. What risk-free rate does Ms. Ahern use in her PRPM risk premium model?
- A. For purposes of her PRPM risk-premium analysis, Ms. Ahern uses a forecasted risk-free rate of 3.58 percent, based on forecasts of the 30-year long-term U.S. Treasury yield (see Ahern Rebuttal, p. 32, lines 12-15, and Exhibit PMA-11, Pages 1-2).

- Q. Does Ms. Ahern use the same risk-free rate in her PRPM risk premium model as that used by Dr. Zepp in each of his two CAPM and risk premium models?
- A. No. In each of his two CAPM and risk premium models, Dr. Zepp uses a 3-year (2012-2014) forward-looking forecasted risk-free rate of 5.17 percent, based on forecasts of the 30-year long-term U.S. Treasury yield (see Zepp Direct, Tables TMZ 10, TMZ 11, TMZ 12, TMZ 15 and TMZ 16).
- Q. What is the magnitude of difference between the risk-free rate employed by Dr. Zepp in his two risk premium models, and that used by Ms. Ahern in her PRPM risk premium model?
- A. In absolute terms, Dr. Zepp's 5.17 percent risk-free rate exceeds Ms. Ahern's 3.58 percent risk-free rate by 159 basis points (517–358 = 159). However, in relative terms the risk-free rate used by Dr. Zepp is fully 44.4 percent greater than that of Ms. Ahern [(5.17 percent 3.58 percent) / 3.58 percent].
- Q. Given the magnitude of difference between the risk-free rates used by the Company's two cost of capital witnesses, what comments does Staff have regarding Ms. Ahern's finding Dr. Zepp's 12.5 percent recommended ROE to be "reasonable, if not conservative?"
- A. Within the bounds of reason, such a finding has no support. In both risk premium models presented by Dr. Zepp in Direct, and the PRPM risk premium model presented by Ms. Ahern in Rebuttal, the estimated cost of equity is determined by adding a risk-free rate to a risk premium value. Thus, for every basis point increase to the risk-free rate, there is a corresponding one basis point increase to the estimated cost of equity. As noted, Dr. Zepp's risk-free rate (5.17 percent) exceeded that of Ms. Ahern (3.58 percent) by 159 basis points. In light of this fact, rather than serving to affirm the reasonableness of Dr.

implies that Dr. Zepp has overstated the Company's cost of equity by 159 basis points, as

Zepp's recommended cost of equity, at a bare minimum Ms. Ahern's Rebuttal Testimony

the metrics she uses in her analysis contravene those used by Dr. Zepp by that magnitude.

Q. Does Staff consider Ms. Ahern's use of a forecasted risk-free rate in her PRPM risk premium model to be appropriate?

A. No. For reasons noted in Staff's Direct Testimony, the use of a forecasted risk-free rate only serves to overstate the estimated cost of equity (see Cassidy Direct, p. 41, lines 13-15, and p. 42, lines 16-22). The appropriate risk-free rate to be used is the current yield on intermediate- or long-term U.S. Treasury securities.

Q. In using a forecasted risk-free rate in her PRPM risk premium model, by how much does Ms. Ahern overstate the cost of equity?

A. Although interest rates have risen slightly since the filing of Staff's Direct Testimony, the current yield on the 30-year long-term U.S. Treasury bond is 3.15 percent. Thus, in using a forecasted risk-free rate of 3.58 percent in her PRPM risk premium model, Ms. Ahern overstates the cost of equity by an additional 43 basis points (358 - 315 = 43).

Q. Staff previously asserted that Dr. Zepp's use of a forecasted risk-free rate in his risk premium models served to overstate the cost of equity by 216 basis points (see Cassidy Direct, p. 42, lines 19-22). In light of Ms. Ahern's Rebuttal, and given the slight increase in the 30-year Treasury yield since the filing of its Direct Testimony, what is Staff's current estimate of Dr. Zepp's overstatement to his risk premium derived cost of equity?

A. At present, Dr. Zepp's risk premium models overstate the cost of equity by 202 basis points. This can be determined in one of two ways; first, by taking the difference between

Dr. Zepp's forecasted risk-free rate and the current 30-year long-term Treasury yield (5.17 percent - 3.15 percent = 2.02 percent), or simply by taking the sum of the two basis point overstatements discussed above (159 + 43 = 202).

- Q. What does Staff conclude regarding Ms. Ahern's stated purpose to demonstrate the inadequacy of both Staff's and RUCO recommended ROEs for presenting her PRPM cost of equity estimates in Rebuttal?
- A. However unintended, Ms. Ahern's cost of capital Rebuttal testimony tends to support the Staff and RUCO ROE recommendations by contradicting the metrics used by Dr. Zepp and suggesting that he has significantly overstated Arizona Water's cost of equity.

# Dr. Zepp's Rebuttal

- Q. How does Staff respond to Dr. Zepp's criticism that when deriving estimates for the cost of equity from its constant growth DCF model, too little weight is placed on analysts' forecasts of EPS growth.
- A. Staff's constant growth DCF model is a balanced one, incorporating estimates of historical and projected growth in DPS, EPS and sustainable growth in equal measure for purposes of estimating the market cost of equity. Staff considers its methodology to be appropriate, as investors look at both historical and projected measures of growth along each of these growth parameters when making investment decisions. For the reasons noted in its Direct Testimony, Staff considers it inappropriate to rely exclusively on analysts' forecasts of EPS growth when determining the dividend growth (g) component of a constant growth DCF model (see Cassidy Direct, pp. 35-37).

A.

Q. What comments does Staff have regarding Dr. Zepp's criticism that it should obtain forecasts of growth from sources other than Value Line?

A. For purposes of its cost of equity analysis, Staff has relied on Value Line as a source for its growth estimates for many years. Among investors, the Value Line Investment Survey is well respected, and perhaps more than any other single investment publication of its kind is readily accessible in the reference section of public libraries all across the country. As a source of forecasted growth, the Value Line Investment Survey provides a uniform 5-year projection for both DPS and EPS for each company it follows, thereby ensuring uniformity in the time horizon over which projections are made for each of Staff's sample water utility companies. (Note: Because one of Staff's sample companies is covered by the Value Line Small Cap Investment Survey, no DPS and EPS projections are available for Connecticut Water).

Q. How does Staff respond to Dr. Zepp's concerns regarding the exclusion of American Water Works ("AWK") from its sample group of companies?

For purposes of its constant growth DCF analysis, Staff measures historical growth in EPS, DPS and sustainable growth over a ten-year period. Accordingly, one criterion necessary for inclusion in Staff's sample group of companies is that a company be publicly traded for a period sufficiently long to facilitate the calculation of a 10-year growth rate for each of those growth parameters. American Water Works was formerly owned by RWE, and was not spun off as an independent publicly traded entity by its parent until mid-2008. As such, there are less than four years of market data available by which growth might be measured to estimate the cost of equity, and it is for this reason that Staff excluded AWK from its sample group of companies.

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If Staff were to include American Water Works in its sample group of companies at Q. this time, what is the longest historical growth rate obtainable for the company?

- At present, historical market data is available for the calculation of only a two-year growth A. rate. American Water Works completed its first full year of operations in 2009, and using its financial performance numbers for that year as a base against which DPS, EPS and sustainable growth might be measured going forward, a 2-year growth rate can be calculated covering the period, 2009-2011.
- Does Dr. Zepp incorporate historical measures of growth for American Water O. Works into his secondary DCF analysis when estimating the cost of equity?
- No. For each of his sample companies, the historical growth rates used by Dr. Zepp in his A. secondary DCF analysis are presented in TMZ Table 3. However, a review of TMZ Table 3 displays no historical growth rates for American Water Works; instead, the letters "nmf" (i.e., no meaningful figure) appear. The reason for this is due to the lack of sufficient historical data being available for the company.
  - What does Staff conclude regarding Dr. Zepp inclusion of American Water Works in his sample group of companies?
- An important standard to be met when selecting a sample company for purposes of A. estimating the cost of equity is that it allow for both historically and prospective meaningful growth measures. Given its short life, AWK is a company that clearly falls short of this standard. Ultimately, Dr. Zepp must choose sample companies that satisfy his criteria and models.

Direct Testimony of John A Cassidy Docket No. W-01445A-11-0310 Page 9

1	IV.	STAFF RECOMMENDATIONS
2	Q.	What are Staff's recommendations for Arizona Water's cost of capital?
3	A.	Staff makes the following recommendations for Arizona Water's cost of capital:
4		1. Staff recommends a capital structure of 49.0 percent debt and 51.0 percent equity.
5		2. Staff recommends a cost of debt of 6.8 percent.
6		3. Staff recommends a cost of equity of 9.4 percent.
7		4. Staff recommends an overall rate of return of 8.1 percent.
8		
9	Q.	Does Staff's silence on any particular issue raised by the Company in its Rebutta
ιo		testimony indicate that Staff agrees with the stated Rebuttal position?
11	A.	No.
12	,	
13	Q.	Does this conclude your direct testimony?
14	A.	Yes, it does.

Arizona Water Company Cost of Capital Calculation Capital Structure And Weighted Average Cost of Capital Staff Recommended and Company Proposed

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Weighted Cost	3.3% 4.8% <b>8.1</b> %	3.3% 6.4% 9.7%
Cost	6.8% 9.4%	6.8%
Weight (%)	49.0% 51.0%	49.0%
Description	Staff Recommended Structure Debt Common Equity Weighted Average Cost of Capital	Company Proposed Structure Debt Common Equity Weighted Average Cost of Capital

Supporting Schedules: JAC-3 and JAC-4. [0] : [8] × [C]

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Arizona Water Company Cost of Capital Calculation Final Cost of Equity Estimates Sample Water Utilities

,			
(E)	조 8.2% <u>9.8%</u> <b>9.0%</b>	<u>K</u> 6.6% <u>12.7%</u> 9.7%	9.4% 0.0% 9.4%
	11 H	H H H	
[0]	92 4.8%	( <u>Rp)</u> 7.2% <sup>6</sup> 13.3% <sup>7</sup>	timates ustment Total
	<b>+</b> +	<b>*</b> * *	age of Overall Estimates Financial risk adjustment Total
[2]	<u>D./Pa</u> 3.4%	$B^{5}$ 0.72 0.72	Average of Overall Estimates Financial risk adjustment Total
		+ + +	Ă
[8]	·	Rf 1.4% 3.2%	
[A] .	<u>DCF Method</u> Constant Growth DCF Estimate Multi-Stage DCF Estimate Average DCF Estimate	CAPM Method Historical Market Risk Premium³ Current Market Risk Premium⁴ Average CAPM Estimate	

<sup>1</sup> MSN Money and Value Line

7 Testimony

<sup>2</sup> Schedule JAC-8

<sup>3</sup> Risk-free rate (Ri) for 5, 7, and 10 year Treasury rates from the U.S. Treasury Department at www.ustreas.gov

<sup>4</sup> Risk-free rate (Rt) for 30 Year Treasury bond rate from the U.S. Treasury Department at www.ustreas.gov

<sup>5</sup> Value Line

<sup>6</sup> Historical Market Risk Premium (Rp) calculated from Ibbotson Associates SBBI 2011 Yearbook data

Arizona Water Company Cost of Capital Calculation Average Capital Structure of Sample Water Utilities

r					
[0]	Total	100.0% 100.0% 100.0% 100.0%	100.0%	100.0%	
[0]	Common <u>Equity</u>	54.0% 46.7% 46.1% 56.7% 56.7%	48.4%	51.0%	
[8]	Debt	46.0% 53.3% 53.9% 57.1% 43.3%	51.6%	49.0%	
[A]	Company	American States Water California Water Aqua America Connecticut Water Middlesex Water SJW Corp	Average Sample Water Utilities	AWC - Actual Capital Structure	

Source: Sample Water Companies from Value Line

Arizona Water Company Cost of Capital Calculation Growth in Earnings and Dividends Sample Water Utilities

(E)		% 4.7% 8.6% 6.3% No Projection % 8.3% 4.8%	% 6.5%
[0]	Earnings Per Share 2002 to 2011 EPS <sup>1,2</sup>	5.1% 6.2% 7.3% 0.4% 3.7%	4.2%
[5]	Dividends Per Share Projected	4.0% 3.9% 4.6% No Projection 1.8% <u>4.5%</u>	3.8%
[8]	Dividends Per Share 2002 to 2011 <u>DPS<sup>1</sup></u>	2.4% 1.0% 7.7% 1.6% 4.8%	3.2%
[A]	Company	American States Water California Water Aqua America Connecticut Water Middlesex Water SJW Corp	Average Sample Water Utilities

1 Value Line

<sup>2</sup> Negative values are inconsistent with the DCF, accordingly, they are excluded from the average.

Arizona Water Company Cost of Capital Calculation Sustainable Growth Sample Water Utilities

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	pie d	ion	
(F)	Sustainable Growth Projected br + vs	Ž	6.6%
<u>[E]</u>	Sustainable Growth 2002 to 2011 br + vs	5.2% 4.3% 3.1% 4.8%	4.6%
[0]	Stock Financing Growth	1.8% 2.1% 1.0% 3.5%	1.8%
[C]	Retention Growth Projected <u>br</u>	6.2% 4.5% 5.6% No Projection 4.0%	4.7%
[8]	Retention Growth 2002 to 2011	3.4% - 2.2% 4.5% 1.3% 3.7%	2.9%
[A]	Company	American States Water California Water Aqua America Connecticut Water Middlesex Water SJW Corp	Average Sample Water Utilities

[B]: Value Line [C]: Value Line [D]: Value Line and MSN Money [E]: [B]+[D] [F]: [C]+[D]

Arizona Water Company Cost of Capital Calculation Selected Financial Data of Sample Water Utilities

[6]	Raw Beta <u>Braw</u> 0.52 0.45 0.60 0.52 0.52
(F)	Value Line Beta
Э	Mkt To Book 1.7 1.6 2.4 2.1 1.6 1.6
[0]	Book Value 21.57 11.07 9.17 13.42 11.62 14.93
<u>ত</u>	Spot Price 4/25/2012 36.34 17.97 22.37 28.38 18.39 23.58
[8]	Symbol AWR CWT WTR CTWS MSEX SJW
[A]	Company American States Water California Water Aqua America Connecticut Water Middlesex Water SJW Corp

[C]: Msn Money

[D]: Value Line

(E): [C] / [D]

[F]: Value Line [G]: (-0.35 + [F]) / 0.67

Arizona Water Company Cost of Capital Calculation Calculation of Expected Infinite Annual Growth in Dividends Sample Water Utilities

[8]	۵į	3.2% 3.8% 4.2%	6.5% 4.6% 6.6%	4.8%
[A]	Description	DPS Growth - Historical¹ DPS Growth - Projected¹ EPS Growth - Historical¹	EPS Growth - Projected¹ Sustainable Growth - Historical² <u>Sustainable Growth - Projected²</u>	Average

1 Schedule JAC-5

2 Schedule JAC-6

# Arizona Water Company Cost of Capital Calculation Multi-Stage DCF Estimates Sample Water Utilities

<b>.</b>	[8]	ō	[0]		딘	[H]	E2
Company	Current Mkt. Price $(P_o)^1$	Projec	Projected Dividends $^2$ (Stage 1 growth) $(\underline{D}_1)$	nds² (Stage 1 ( <u>D</u> ı)	growth)	Stage 2 growth <sup>3</sup> (g <sub>n</sub> )	Equity Cost Estimate (K) <sup>2</sup>
	4/25/2012	Ą		d <sub>3</sub>	q <sub>4</sub>		
American States Water	36.3	1.16	1.22	1.27	1.34	6.5%	9.6%
Selfornia Mater	18.0	0.64	. 89.0	0.71	0.74	6.5%	10.0%
Valia America	22.4	0.67	0.70	0.73	0.77	6.5%	9.4%
Aqua Allenta Compostiont Water	28.4	0.97	1.02	1.07	1.12	6.5%	9.8%
Middlesov Water	18.4	0.75	0.78	0.82	0.86	6.5%	10.4%
Middlesex Water	23.6	0.73	0.76	0.80	0.84	6.5%	9.5%

 $\sum_{i=1}^{n} \frac{D_{i}}{(1+K)^{i}} + \frac{D_{n}(1+g_{n})}{K-g_{n}} \left[ \frac{1}{(1+K)} \right]^{n}$ 

9.8%

Average

Where:  $P_0$  = current stock price

 $D_r$  = dividends expected during stage 1 K = cost of equity

n = years of non – constant growth  $D_r$  = dividend expected in year n

g = constant rate of growth expected after year n

<sup>2</sup> Derived from Value Line Information

<sup>3</sup> Average annual growth in GDP 1929 - 2011 in current dollars.

<sup>4</sup> Internal Rate of Return of Projected Dividends

# BEFORE THE ARIZONA CORPORATION COMMISSION

Chairman
BOB STUMP
Commissioner
SANDRA D. KENNEDY
Commissioner
Commissioner
PAUL NEWMAN
Commissioner
BRENDA BURNS
Commissioner

GARY PIERCE

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, FOR A DETERMINATION OF THE CURRENT FAIR VALUE OF ITS UTILITY PLANT AND PROPERTY AND FOR INCREASE IN ITS WATER RATES AND CHARGES FOR UTILITY SERVICES

DOCKET NO. W-01445A-11-0310

**SURREBUTTAL** 

**TESTIMONY** 

OF

KATRIN STUKOV

UTILITIES ENGINEER

ARIZONA CORPORATION COMMISSION

**UTILITIES DIVISION** 

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21

22

23

Q.

A.

Yes.

# INTRODUCTION AND PURPOSE OF TESTIMONY 1 2 Q. Please state your name, place of employment and job title. My name is Katrin Stukov. My place of employment is the Arizona Corporation A. 3 Commission ("Commission"), Utilities Division, 1200 West Washington Street, Phoenix, 4 Arizona 85007. My job title is Utilities Engineer. 5 6 7 Are you the same Katrin Stukov who submitted Direct Testimony on behalf of the Q. **Utilities Division?** 8 9 A. Yes. 10 What was the purpose of that testimony? 11 Q. My Direct Testimony provided the Utilities Division Staff's ("Staff") engineering 12 A. evaluation of Arizona Water Company's ("AWC" or "Company") water systems for this 13 rate case proceeding. 14 15 What is the purpose of your Surrebuttal Testimony? 16 0. To provide Staff's response to the Company's rebuttal testimony of Fredrick Schneider, 17 A.

specifically relative to the statement that Staff has offered no evidence that the Company's

proposed amount of \$3,500 Off-Site Facilities Fee is not reasonable.

Did Staff determine an appropriate Off-Site Facilities Fee of \$ 1,500?

Q. Did Staff's Direct Testimony and work papers include explanation on how Staff arrived at this amount?

- A. Yes. As explained on page 37 of my Direct Testimony and work papers, Staff used the Company's water use data sheets for Apache Junction and Superior systems for the test year in the rate application, the proposed facilities capacity of 3 MGD and an estimated cost of \$8.8 million to calculate an appropriate fee amount. Based on the capacity of the facility and the peak day water use from the water use data sheets, Staff determined an appropriate Facilities Fee of \$1,500 for a new service connection with a 5/8 x 3/4-inch meter.
- Q. What was the amount of the total projected capital cost to design and construct the Off-Site Facilities referenced in Direct Testimonies of Mr. Schneider and Mr. Harris (including Exhibits FKS-7 and JDH-7)?
- A. \$ 8.8 million.
- Q. Did you use the Company's projected cost of \$ 8.8 million to calculate an appropriate fee amount?
- A. Yes. As explained on page 37 of my Direct Testimony and work papers.
- Q. Did the Company provide any information, prior to its Rebuttal Testimony, substantiating its 2028 estimate of \$13.4 million to construct its proposed Central Arizona Project treatment plant.
- A. No.

Surrebuttal Testimony of Katrin Stukov Docket No. W-01445A-11-0310 Page 3

- 1 2
- Q. If you used the \$13.4 million figure and the same calculation method you used to calculate the \$1,500 fee, what would be the result?
- A. That calculation would yield a figure of \$2,255.

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- Q. Is a Commission Hook-Up Fee intended to or should it cover the entire cost of constructing off-site facilities?
- A. No.

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# Q. Please explain?

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A. If a Company pays for all off-site facilities with hook-up fees, i.e. contributions in aid of construction, and on-site facilities with advances in aid of construction, there is a danger of eventually having a Company with little or no rate base. To avoid this, a Company should use its own money to pay for at least a portion of off-site facilities. For this reason, the intent of off-site hook-up fees is to assist companies to pay for off-site plant, not to completely pay for all off-site plant.

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# Q. Does this conclude your Surrebuttal Testimony?

A. Yes, it does.

# BEFORE THE ARIZONA CORPORATION COMMISSION

UART FIERCE							
Chairman							
BOB STUMP							
Commissioner							
SANDRA D. KENNEDY							
Commissioner							
PAUL NEWMAN							
Commissioner							
BRENDA BURNS							
Commissioner							
IN THE MATTER OF THE APPLICATION	)	De	OCKET	NO.	W-014	145A-1	1-0310
OF ARIZONA WATER COMPANY, AN	)						
ARIZONA CORPORATION, FOR A	)						
DETERMINATION OF THE FAIR VALUE	)						
OF ITS UTILITY PLANT AND PROPERTY,	)	•					
AND FOR ADJUSTMENTS TO ITS RATES	)						
AND CHARGES FOR UTILITY SERVICE	)						
FURNISHED BY ITS WESTERN GROUP	)						
AND FOR CERTAIN RELATED	)						
APPROVALS.	)						

SURREBUTTAL

**TESTIMONY** 

OF

JEFFREY M. MICHLIK

PUBLIC UTILITIES ANALYST V

UTILITIES DIVISION

ARIZONA CORPORATION COMMISSION

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# EXECUTIVE SUMMARY ARIZONA WATER COMPANY EASTERN GROUP DOCKET NO. W-01445A-11-0310

The Surrebuttal Testimony of Jeffrey M. Michlik addresses the following issues:

1) Distribution System Improvement Charge; 2) Plant Not Used and Useful; 3) Plant Adjustments; 4) Fleet Fuel Expenses; 5) Projected Pumping and Transmission & Distribution Expenses; 6) Rate Case Expense; 7) Property Taxes; 8) Miscellaneous Expenses; 9) Purchased Water Expense (San Manuel only).

Staff recommends that, if Well No. 17 is included in rate base, the post-test year plant items taken out of service by the Company should be removed from rate base.

Staff recommends that the Company file its Groups (Eastern, Western, and Northern) together when its rate cases for any combination of those Groups are based on the same test year.

Surrebuttal Testimony of Jeffrey M. Michlik Docket No. W-01445A-11-0310 Page 1

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I. **INTRODUCTION** 1 Please state your name, occupation, and business address. 2 Q. 3 My name is Jeffrey M. Michlik. I am a Public Utilities Analyst V employed by the A. Arizona Corporation Commission ("Commission") in the Utilities Division ("Staff"). My 4 5 business address is 1200 West Washington Street, Phoenix, Arizona 85007. 6 Are you the same Jeffrey M. Michlik that filed Direct Testimony in this case? 7 Q. 8 Yes, I am. A. 9 RESPONSES TO COMPANY'S REBUTTAL TESTIMONY 10 II. 11 Distribution System Improvement Charge ("DSIC") Α. Did you address the DSIC in your direct testimony? 12 Q. Yes. 13 A. 14 Have you reviewed the rebuttal testimonies of Arizona Water Company ("Company" 15 Q. or "AWC") witnesses Pauline M. Ahern and Joseph D. Harris regarding the DSIC? 16 17 Yes. A. 18 What did Ms. Ahern file in support of the DSIC? 19 Q. Generally, quotes from State Public Utility Commissions in which DSICs have been 20 A. implemented, reports from credit rating agencies, excerpts from the National Association 21 of Regulatory Utility Commissioners ("NARUC") best practices, and infrastructure 22 23 reports.

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#### Q. Is it surprising to Staff that adopting a DSIC improves a utility's credit rating?

No. A DSIC accelerates cash flow collection, and it shifts risk from the Company to A. ratepayers outside of a general rate case. Thus, the DSIC leans toward ensuring a return rather than providing an opportunity to earn a fair rate of return. The question that must be answered is whether the additional cost and the shift in risk to ratepayers are properly balanced with the benefits.

#### How many states have adopted a DSIC or similar mechanism? Q.

Staff's understanding is that eleven states have adopted a DSIC or similar mechanism. A. This may suggest that most states consider the costs of adopting a DSIC to outweigh the benefits.

Q. Is Staff aware of any organizations that have expressed concern that DSICs fail to provide the requisite balance of costs and benefits?

Yes. As cited in Mr. Rigsby's direct testimony, the National Association of State A. Consumer Advocates does not endorse DSIC-type mechanisms. Further, the Food and Water Watch organization calls the DSIC an outright rip-off for consumers (see Attachment A).

# The Company has noted the advantages of adopting a DSIC for water companies. Q. What are the benefits or advantages to ratepayers?

One assertion is that the DSIC will help water utility companies provide safe and reliable A. drinking water. However, all water utilities in the state of Arizona have an obligation to provide safe and reliable drinking water with or without a DSIC. Another assertion is that the DSIC increase rates more gradually. While gradualism is a positive attribute, it should be weighed against the potential detriments of adopting a DSIC including: introducing the

A. Staff would recommend the following (Staff reserves the right to add additional conditions as the DSIC process evolves):

element of single issue ratemaking (i.e., not all of the components of revenue requirement are reviewed at the same time as occurs in a rate case, and an earnings test does not provide the same level of scrutiny as a rate case to ensure that over-earning is not present); and accelerated recovery disrupts the balance that exists in the ratemaking framework.

- Q. What is Staff's response to the notion that a DSIC is needed to overcome regulatory lag that negatively affects utility plant investment?
- A. Utilities regularly make plant investments and incur incremental costs between rate cases. The regulatory framework assumes that these costs are offset by other regulatory benefits. For example, utilities often experience customer growth and benefit from collection of the commensurate associated incremental revenues. Another example of regulatory lag that benefits a utility is the recovery of investment via depreciation expense between rate cases. Furthermore, negative regulatory lag acts in a positive manner to encourage utilities to find operating efficiencies.

# Q. Did Staff offer an alternative to the DSIC in its direct testimony?

- A. Yes, however, the Company rejected Staff's alternative with reservation. Apparently, the Company is unwilling to compromise on its proposed DSIC to provide an opportunity to more gradually introduce a new regulatory mechanism with which it has no prior experience or data.
- Q. If the Commission disagrees with Staff and is inclined to adopt a DSIC, what conditions would Staff recommend be included in a DSIC for the Company's Eastern Group?

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- 1. Limiting authorization to the Eastern Group subsystems that have water loss over 10 percent, i.e., Oracle/Saddlebrooke, Bisbee and Miami.
- 2. Requiring the Company to submit quarterly filings for the first year, semi-annual filings thereafter, and a cumulative annual report.
- 3. Requiring that charges be revised and become effective on a yearly basis.
- 4. Directing Staff to review the Company's initial annual filing and prepare a memorandum and recommended order to be approved by the Commission before the initial DSIC surcharge is implemented. Staff will review subsequent filings at its discretion (but no later than the Company's next rate case), however the DSIC surcharges would become effective 30 days after the annual filing.
- 5. Requiring that any over-collections (for overcharges due to improperly calculated DSICs after the initial year) be refunded with interest at the weighted average cost of capital ("WACC") authorized in the Company's most recent rate case. Such refund would be implemented as determined by the Commission in a future rate case.
- 6. Requiring that the initial and any subsequent yearly increase be limited to 2 percent of the Commission-authorized revenue by subsystem in this case, that the cumulative annualized DSIC revenue by subsystem be limited to 6 percent, and that the DSIC revenue be subject to an earnings test as discussed below.
- 7. Limiting the plant items eligible for a DSIC to those in the following accounts:
  - a. Account 343 Transmission and Distribution Mains
  - b. Account 344 Fire Mains
  - c. Account 345 Services
  - d. Account 346 Meters
  - e. Account 347 Meter Installations
  - f. Account 348 Hydrants

- 8. Requiring that the filings referenced in recommendation #2 above contain the total amount of plant built during the period reconciled to the amounts recorded by individual plant account, along with all supporting documentation and any required regulatory permits.
- Directing the Company to record any plant items replaced in accordance with the NARUC Uniform System of Accounts and to include documentation showing these transactions in all filings.
- 10. Reducing the DSIC revenue by 10 percent to account for any cost savings such as reduced operating expenses resulting from plant improvements.
- 11. Requiring an earnings test, each time Staff reviews the Company's filings, that limits the authorized DSIC revenue when the operating income (rate base x WACC) would exceed the authorized WACC. The earnings test should be based on the most recent available operating income adjusted for any operating revenue and expense adjustments adopted in this rate proceeding and the rate base adopted in this rate case updated to recognize changes in plant, accumulated depreciation, contributions-in-aid-of-construction ("CIAC") advances-in-aid-of-construction ("AIAC") and accumulated deferred income taxes through the most recently available (no less than quarterly) financial statements.
- 12. Directing the Company to notify customers of changes in the DSIC by including appropriate explanatory information on the first bill they receive following any change in the DSIC rate as well as in the first billing following the effective date of rates established in this rate case.
- 13. Specifying that the costs of only replacement facilities (from the six accounts listed above) to serve existing customers are recoverable through a DSIC. Specifying that projects receiving funds from federal, state and other non-investor sources are not DSIC eligible property.

- 14. Application of the DSIC charge as a percentage carried to two decimal places (e.g., 1.54 percent) to the total amount billed to each customer under the Company's otherwise applicable rates and charges.
- 15. Informing the Company that if it cannot demonstrate a reduction in its water loss, the DSIC monies collected may be required to be refunded to ratepayers.

# Q. Has Staff developed the specifics of how the DSIC surcharge would be calculated?

- A. Not at this point, but Staff intends to file additional testimony or a late filed exhibit at a later date, Staff at this point has only provided a general framework from Staff's perspective of what should be included in a DSIC.
- Q. For clarification purposes, is Staff offering both its recommended Sustainable Water

  Loss Improvement Program ("SWIP") and a Staff recommended DSIC?
- A. No. Staff recommends the SWIP as discussed in my direct testimony. However, if the Commission is inclined to adopt a DSIC as opposed to the SWIP, Staff recommends adopting at least the conditions discussed above.
- Q. Does the Company continue to equate a DSIC with an Arsenic Cost Recovery Mechanism "ACRM" in its rebuttal testimony?
- A. Yes.
- Q. Does Staff agree that the DSIC proposed by the Company is equivalent to an ACRM?
- A. No.

# Q. Can you give a brief history of the ACRM?

A. Yes. On January 23, 2006, new rules from the Environmental Protection Agency ("EPA") became effective reducing the permissible arsenic contamination level in drinking water from 50 to 10 parts per billion. Due to the anticipated high arsenic treatment costs, related financial burdens for water utilities and the large number of affected utilities, the Commission authorized special processes to allow recovery of arsenic treatment costs. Although these processes must be authorized within a rate case, they provide utilities a more timely and efficient means to recover arsenic remediation costs than is available through normal ratemaking procedures. The special process established for Arizona Water Company is referred to as an Arsenic Cost Recovery Mechanism, or simply an ACRM. An ACRM provides for recovery of arsenic related capital improvements and narrowly defined "allowable" O&M expenses (i.e., media replacement, media disposal and media regeneration), between rate cases.

# Q. What are some of the differences between the Company's proposed DSIC and an ACRM?

A. The ACRM was implemented to address a Federal mandate to reduce the level of arsenic is potable water. The DSIC is designed to help fund the normal replacement of aging infrastructure. The ACRM was implemented to address what was anticipated to be an extraordinary financial burden that would jeopardize the continuing effective operation of water utilities to provide safe, sufficient and reliable drinking water. No similar circumstance applies to the DSIC. The ACRM was implemented to avoid an anticipated overwhelming regulatory burden resulting from potentially hundreds of near simultaneous urgent filings before the Commission. The DSIC does not relate to any such regulatory burden.

Surrebuttal Testimony of Jeffrey M. Michlik Docket No. W-01445A-11-0310 Page 8

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- Q. Please comment on Ms. Aherns statement on page 28 of her rebuttal testimony that the Arizona Corporation Commission has imposed its own mandate on Water Companies to reduce their water losses to less than 10 percent?
- A. Reducing unaccounted for water does not parallel reducing the maximum contaminant level for arsenic. On a fundamental basis, the amount of arsenic in groundwater is not a function of the operation of the water system and is outside of the Company's control. However, the Company operating activity can and does impact the amount of unaccounted for water. Proper planning for replacement and repair and maintenance affects water loss. Usually, the Staff recommendation to reduce unaccounted for water calls for a plan to reduce water loss to below ten percent, but provides an exception if the plan is not cost effective. Cost effectiveness is not a significant criteria for allowing a waiver from complying with the arsenic maximum contaminant level.

#### B. Plant Not Used and Useful

- Q. Have you reviewed the rebuttal testimonies of Joel M. Reiker and Fredrick Schneider regarding Miami Well No. 17?
- A. Yes.

# Q. Does Staff agree with the Company?

- A. No. Engineering Staff has consistently applied the used *and* useful standard when disallowing plant.<sup>1</sup>
- Q. Was Miami Well No. 17 in service and providing service to test year customers?
- A. No. As stated in the Company e-mail between Staff Engineer Katrin Stukov and Mr. Schneider, Well No. 17 has been out of service since August 2008. Well No. 17 consisted

<sup>&</sup>lt;sup>1</sup> The Company unsuccessfully argued in its prior rate case (Decision No. 71845) that the definition should be used *or* useful.

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of a well (\$30,174), pumping plant structures (\$457), and electric pumping equipment (\$6,905). The Company in its rebuttal testimony stated that well 17 was placed back in service on February 13, 2012, two years after the test year (See Attachment B).

# Q. What else did Staff note when examining the Company's plant?

A. Staff noted that starting on January 1st, 2011 and continuing forward, several of the Company's Eastern Group plant items were taken out of service (see Direct Testimony of Katrin Stukov, Description of System footnotes). The Company is requesting the best of both worlds, first by taking these plant items out-of-service after the test year without a proforma reduction to rate base because it is outside the test year, and at the same time it is asking for a proforma increase in rate base for post-test year plant. The Company's asymmetrical ratemaking proposal should be denied. Staff recommends that if Well No. 17 is included in rate base, the post-test year plant items taken out of service by the Company should be removed from rate base.

# C. Plant Adjustments

- Q. Has Staff adopted RUCO's adjustment to reduce Post-Test Year plant as agreed to by the Company in its rebuttal?
- A. Yes. The adjustment is shown is Surrebuttal Schedule JMM-5 for each of the systems.

## D. Fleet Fuel Expenses

- Q. Did Staff state in its direct testimony that it would update its schedules based on new gasoline price information?
- A. Yes.

Q. Did the Company accept Staff's fuel expense adjustment in the Company's Western Group case?

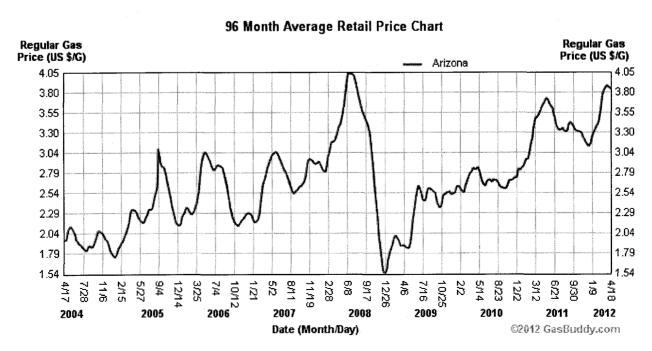
A. Yes. On page 15 of Company Witness Reiker's Rebuttal Testimony in Docket No. W-01445A-10-0517, the Company adopted Staff's adjustment.

# Q. Did Staff use the same methodology in this case?

A. Yes. Due to the volatility of gasoline, Staff utilized the same methodology – a 12-month average of known and measureable costs. In the previous case, the gasoline price data suggested that the price was going down. Using an averaging methodology benefitted the Company and the Company accepted Staff's adjustment. In the present case, gasoline prices have increased; using the same averaging methodology is not beneficial to the Company and now the Company rejects Staff's adjustment. The Company is inconsistent in its recognition of an appropriate method to address the volatility in gasoline prices.

# Q. Historically have gasoline prices been stable?

A. No, as demonstrated in the graph below:



Surrebuttal Testimony of Jeffrey M. Michlik Docket No. W-01445A-11-0310 Page 11

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# Q. What is the fallacy of Mr. Reiker's argument?

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He assumes gas prices will stay the same or increase. While the data suggest that the price of gas has increased over time, it does not remain at peak levels, and it can drop

4 precipitously.

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# Q. What does the latest gasoline price data suggest?

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A. As of the second quarter of 2012, gasoline prices are trending downward.

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# Q. Mr. Reiker stated that the average price of gasoline in Arizona had risen to \$3.887 per gallon. Please comment.

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A. Yes. But gasoline price data as of April 18, 2012 shows gasoline prices declining to \$3.852 per gallon, demonstrating the high volatility of gasoline and why an average of 12

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months of known and measureable gasoline prices is preferable than selecting a single

price in time. Further, setting the price at a single point could lead to a windfall profit to

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the Company. If rates had been established based on the historical peak \$4.05 gasoline

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price in 2008, the Company would have over-recovered since the price has never again

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reached \$4.05.

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# Q. Has Staff adjusted its schedules to reflect the most recent known and measureable price data?

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A. Yes. Staff now recommends a price per gallon of \$3.47.

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# Q. Does this reflect the rise in gasoline prices from January to March?

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A. Yes, updating the 12-month average to recognize gasoline prices through March 2012 results in a \$3.47 per gallon price as compared to the \$3.38 per gallon amount Staff

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recommended in direct testimony.

Surrebuttal Testimony of Jeffrey M. Michlik Docket No. W-01445A-11-0310 Page 12

Q. Is \$3.47 per gallon price greater than the average 2010 test year gasoline price?

A. Yes.

## Q. What is Staff's recommendation?

A. Staff recommends an average price of gasoline of \$3.47; these changes are reflected in Staff Surrebuttal Schedule JMM-11.

# E. Projected Pumping and Transmission & Distribution Expenses

- Q. Has Staff conducted a more thorough analysis of the Company's regression models?
- A. Yes.

# Q. What is a regression analysis?

A. Regression analysis is a statistical technique for determining "a line of best fit" for a set of data points. In this case, a simple regression model with a dependent variable "Expenses" (Y) and independent variable "Year" (X) is used to assess the association between the two variables. The Company has assumed expenses are growing linearly over time. Each year expenses will grow/fall by some fixed amount. Staff has maintained this assumption of linear growth in its review and analysis of expenses. Regression analysis allows estimation of the equation for the line specifying the relationship between expenses and time. The slope-intercept form the line is Y = m(x)+b (expenses = slope\*year+intercept).

In the equation, Y is the dependent variable (in this case expenses), X is the year in question, "m" is the slope of the regression line and "b" is the Y intercept of the regression line. In this analysis estimating "m" is the primary goal, because it represents the change in Y divided by the change in X, which in this case, is the change in expenses each year. The slope "m" and intercept "b" are easily calculated with the use of the Excel regression

tool. Using the relationship determined by regression, expenses (Y) can be estimated by entering the appropriate year (X).

# Q. Can you explain the method in more detail?

A. Yes. The relevant data for the Eastern group is presented in Appendix A (Table 1 and Table II). The following example is presented using the Superstition water system, Based on the regression equation Y = m(x) + b, the projected 2014 expense amount as presented in Table 1 for the Superstition water system is calculated as follows: \$1,164,033 (rounded) = \$41,367(14years) + \$584,895. In this case, the slope "m" is \$41,367 and the Y-intercept "b" is \$584,895. The slope indicates that each year expenses should increase by approximately \$41,367, assuming that the "m" is statistically significant.

# Q. Are the Company-proposed T&D pro-forma adjustments based on results that are statistically significant and statistically robust?

A. No. A statistically robust estimate could be confirmed using data over different time periods. The Company used 11 years of data in its regression analyses. Staff has performed analyses using shorter periods, specifically 3 through 10 years. The results differ radically among the different formulations of the model(s) (See Table II in Appendix A).

# Q. Discuss the meaning of R and R squared, as presented in Table II.

A.

The coefficients of correlation ("R") are measures of the strength and direction of linear relationships, and range between negative 1 (perfect inverse linear relationship) and positive 1 (perfect direct linear relationship). The coefficients of determination ("R squared") are the squares of the coefficients of correlation (R) for these simple regression

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models. For a simple regression model the R squared can be viewed as the portion of the variation in Y attributed to the variation in X.

The R squared for the Company's 11-year regression model are 60.46 percent for Superstition, 35.05 for Cochise, 0.01 percent for San Manuel, 26.41 percent for Oracle, and 30.11 percent for Winkelman. The Company's eleven-year models (For all systems other than SaddleBrooke Ranch) and its four-year model for SaddleBrooke Ranch indicate that *only* Saddle Brooke Ranch has an R squared exceeding 75 percent, a level indicating that over three-quarters of the variation in expenses is explained by the change in time. The R squared for the four-year SaddleBrooke Ranch model indicates that 89.31 percent of the total variation in T&D expenses is explained by years. The other 10.69 percent is explained by something else. The other models' R squareds cannot support such a high correlation between expenses and time for the other systems. Table II also presents P-Value, a measure of statistical significance for an independent variable. This will be discussed below.

# Q. What do you mean by statistical significance?

A. As described above, regression analysis has been used to estimate the slope of a line, which in this case is the change in expenses per year. In every model considered, the data never perfectly fits the regression line. This is expected when dealing with real world data. The consequences of this less than perfect fit are that the regression results must be viewed as estimates.

The P-Values shown in Table II, indicate whether the results are significantly different from zero. In simple terms, a slope-coefficient of zero means that this variable has no impact. The regression output shows a 95 percent confidence interval that can be used to

Surrebuttal Testimony of Jeffrey M. Michlik Docket No. W-01445A-11-0310 Page 15

A.

quantify the low case estimate (lower bound) and high case estimate (upper bound) for the true slope that relates expenses to time. When the P-Value is greater than 5.00 percent, zero is inside the confidence interval and the slope estimate is considered statistically insignificant because it has no practical use, meaning that the variable has no consequence. Additionally, the lower bound of the estimate will be negative and the upper bound will be positive, which creates a confusing and useless message that the slope may be negative, or may be positive, or somewhere in between, perhaps even zero. The conclusion is that no known and measureable adjustment could be based on such an ambiguous result.

The P-Values for the Company's 11-year regression model are 0.48 percent for Superstition, 5.50 for Cochise, 98.27 percent for San Manuel, 10.59 percent for Oracle, and 8.05 percent for Winkelman. The P-Value for the Company's 4-year regression model is 5.49 percent.

Only the Company's Superstition water system has a P-Value less than 5.00 percent (0.48 percent). However, as discussed above with an R squared value of 60.46 percent, the regression model is not useful.

## Q. What conclusion can be drawn from the selected statistical data in Table II?

First, the combination of low R squared values and high P-Values make the Company's use of 11-year statistical regression (and 4-year for SaddleBrooke Ranch) invalid. Second, in the absence of the constraint to use a historical test year and assuming a statistical projection based on a regression analysis was determined to be appropriate, the best period for the regression model is 4 years, not 11 years as proposed by the Company for the Superstition, San Manuel, Oracle, and Winkelman water systems (the other two systems

Surrebuttal Testimony of Jeffrey M. Michl	ik
Docket No. W-01445A-11-0310	
Page 16	

are not relevant). Using a 4-year regression would result in negative pro-forma adjustments for each of the systems except for a nominal \$373 annual increase for the SaddleBrooke Ranch water system.

- Q. Has Staff compared the Company's 2011 actual transmission and distributions results with the projected estimates?
- A. Yes.

- Q. What are the results?
- A. As expected the actual amounts the Company expended on transmission and distribution were substantially less than the Company's flawed regression models predicted, as shown in Table III.

- Q. Do you have other comments?
- A. Yes.

- Q. Please comment on Company witness Reiker's statement on page 16, line 1 about the known and measureable standard?
- A. As explained above *the known condition or the known pattern of change* suggests a downward trend and is statistically significant, not the reverse.

- Q. Please comment on Company witness Reiker's statement on page 19, line 24 about the Company freezing dividends.
- A. Mr. Reiker suggests that the Company did freeze its dividends during 2008, which the Company confirmed in response to RUCO data request 5.01. To clarify, the Company did pay dividends in the amount of \$1,071,900, but did not increase the amount. However, in

2011, the Company has again increased its dividends to \$1,169,100, even though as explained above, the expenses for distribution and transmission costs continue to decline.

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- Q. Is normalizing known and measureable expenses over a three-year period preferable to a projection of future expenses based on a faulty regression analysis?
- A. Yes, Staff concludes that it is.

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# F. Rate Case Expense

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- Q. Have you read the Company's response to rate case expense, starting on page 21, of Mr. Reiker's testimony?
- A. Yes.

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- Q. Has the Company demonstrated significant economies in rate case expense since its prior rate cases?
- A. No.

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Q. Has the Company's choice to separate its filings placed additional burdens on Staff, RUCO, the Hearing Division, the Commission, and the Company?

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A.

chose to file its groups separately. Staff and RUCO have already filed two direct and now two surrebuttal testimonies for the Eastern Group. The Hearing Division has already issued one Recommended Order and Opinion for the Western Group and will now have to

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issue at least one more for the Eastern Group. The Commission has already issued one Decision for the Western Group and will now have to issue a separate Decision for the

Yes. Instead of filing all of the Company's groups and systems together, the Company

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Eastern Group. The Company has yet to file its Northern Division which will consume

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more time and effort. Bottom line, this is not an effective use of time for Staff, RUCO,

duplicative and repetitive.

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Q. Are the issues and adjustments proposed by the Company and recommended by Staff made in this case similar to those in the Western Group?

The whole process is

the Hearing Division, the Commission, and the Company.

- A. Yes.
- Q. Mr. Reiker on page 24, of his rebuttal testimony provides the docket number and date filed for its Northern Group, Eastern Group, and Western Group, and he states that Staff did not object to the Company filing these Groups individually versus as one filing. Please comment.
- A. The Company filed these cases in 2000, 2002 and 2004 and used difference test years for each. In this instance the Company's filing are separated by only three months.
- Q. Mr. Reiker on page 23, of his rebuttal testimony relies on Decision No. 58120, dated December 23, 1992, to support filing its groups separately. Please comment.
- A. Nearly two decades have passed since this Decision was rendered, and circumstances have changed in terms of a movement toward consolidating rates, technologies and access to computers and software and the ever pressing expectations for utilities to find operating efficiencies.
- Q. Please comment about the Company citation on page 27 of Mr. Reiker's testimony that Staff has recommended rate case expense of \$400,000 for Pima Utility Company?
- A. In an attempt to bolster its argument the Company cites the current Pima Water Utility Company rate case, and Staff's rate case expense recommendation of \$400,000.

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Although, I am not the analyst assigned to the case, Staff has always judged each case on an individual basis, that is because certain facts may not be the same as in other cases. However, I would note that had Pima Water Utility Company used the Company's methodology it would have filed either the water or wastewater division first, and then waited three months and filed the other division potentially increasing the rate case expense request well beyond \$400,000.

- Are you aware of any other Water or Wastewater Company, utilizing the same test Q. year and filing its systems, districts, or divisions a few months apart thereby increasing rate case expense?
- No. Α.
- Has the Company adequately explained why it needed to file its groups separately, Q. after Staff suggested that it file all its groups together in a pre-rate case meeting (See Attachment C)?
- No. Mr. Reiker on page 25 of his rebuttal testimony attempts to support the Company's A. separate Group filing by noting that the days to process its consolidated filing (08-0444) were longer than for its individual Group rate cases. The Company has not demonstrated that the length of time for processing the consolidated rate case versus individual Group rate cases was related to the consolidation versus other factors.

#### Does Staff have any additional recommendations? Q.

Yes. Staff recommends that the Company file its Groups (Eastern, Western, and Northern) A. together when its rate cases for any combination of those Groups are based on the same test year.

Surrebuttal Testimony of Jeffrey M. Michlik Docket No. W-01445A-11-0310 Page 20

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# G. Property Taxes

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Q. Has the Company proposed increasing its current effective property tax rate for known and measurable changes?<sup>2</sup>

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A. Yes, Staff accepts these changes, and they are reflected in Staff's surrebuttal schedules.

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# H. Miscellaneous Expenses

7 8 Q. Has Staff adopted RUCO's adjustment to reduce Miscellaneous Fees by \$10,664 as agreed to by the Company in its rebuttal?<sup>3</sup>

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A. Yes. The adjustment is shown is Surrebuttal Schedule JMM-13 for each of the systems.

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# I. Purchased Water Expense (San Manuel only)

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Q. Has Staff adopted the \$82,364 downward adjustment for the San Manuel system proposed by Mr. Reiker's rebuttal testimony (pages 35 and 36) to reflect a revised

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purchased water agreement?

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A.

Yes. The adjustment is shown in Surrebuttal Schedule JMM-14 for the San Manuel system.

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Q. Does your silence on any of the issues, matters or findings addressed in the testimony of any of the witnesses for the Company constitute your acceptance of their positions on such issues, matters or findings?

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A. No. Staff limited its discussion to the specific issues outlined above. Staff's lack of response to any issue in this proceeding should not be construed as agreement with the Company's position in its Rebuttal Testimony; rather, where there is no response Staff

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relies on its original Direct Testimony.

See page 28, line 4 rebuttal testimony of Company witness Mr. Reiker.

See page 30, line 10 rebuttal testimony of Company witness Mr. Reiker.

Surrebuttal Testimony of Jeffrey M. Michlik Docket No. W-01445A-11-0310 Page 21

- Q. Does this conclude your Surrebuttal Testimony?
- A. Yes, it does.

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# ATTACHMENT A





# WATER

# The Distribution System Improvement Charge: A Rip-Off For Consumers

Fact Sheet · October 2011

Investor owned water utility companies are pushing unreasonable rate schemes on consumers across the country. These schemes involve special surcharges that automatically increase water bills without a full public review, so that private utility companies can more quickly make a return on certain water distribution projects and ensure their long-term profitability. The companies are essentially trying to boost their earnings and shed regulatory oversight that protects consumers.

Although the scheme goes by different names in different states, it is most commonly referred to as a Distribution System Improvement Charge (DSIC).<sup>2</sup> This innocuous-sounding name obscures the real objective: to boost and ensure corporate profits by shifting risks to the public and bypassing standard consumer protections. (Community activists fighting this scheme have noted that a more fitting title would be a Reduction in Public Oversight For Financing, or RIPOFF.) In the states where it is allowed, it is a boon for the private water industry that comes at the expense of the public.

# **Avoided Public Oversight**

The DSIC scheme allows investor owned water utilities to increase customer bills without the standard regulatory process that protects the public from the exploitative prices and unfair practices possible under private monopolies.<sup>3</sup> In most states, a public utility commission oversees the finances and approves the rates of investor owned water utilities to prevent the companies from abusing their monopoly power.<sup>4</sup> By avoiding full regulatory scrutiny, surcharge schemes can lead to unwarranted profits,<sup>5</sup> as well as skewed investment decisions. They incentivize certain projects at the expense of other, possibly more prudent, ones,<sup>6</sup> and can compel companies to overinvest to maximize their financial benefit from the scheme.<sup>7</sup>

David Sade, West Virginia's deputy consumer advocate, said that allowing such a scheme would "remove one of the most important counterbalances to the inclinations of monopoly utilities to overbuild, or 'gold plate' their systems." Taking time to conduct a full financial review, Sade explained, "serves to encourage monopoly utilities to engage in prudent investment decisions and operate more

efficiently."8 DSIC schemes bypass this necessary public oversight.

## **Automatic Rate Increases**

With the DSIC scheme, investor owned water utilities can automatically increase customer bills up to a certain percentage — from 3 percent to 10 percent, depending on the state<sup>9</sup> — after repairing or replacing water pipelines. Then, when private water utilities want a larger increase, they follow the normal procedures and file a rate case.<sup>10</sup> The largest investor owned water utilities typically file for rate increase every two years,<sup>11</sup> whether or not they have imposed surcharges.<sup>12</sup> When they do, they roll any existing surcharges into their base rates and reset the surcharge to zero.<sup>13</sup> This obscures the long-term consumer cost of the mechanism. Over time, the rolled-in surcharges can add up to a considerable premium on customer bills.

For example, infrastructure surcharges added \$80 million to Aqua Pennsylvania's total authorized revenues between 1997 — when the scheme went into effect —and mid-2010 (see graph). The company received, on average, only

"[I]t is inappropriate to tilt the regulatory balance against consumers and shift business risk away from water companies simply for the purpose of creating an incentive for these companies to fulfill their basic obligation to provide safe and adequate water service."

 from the National Association of State Utility Consumer Advocates' resolution against automatic infrastructure surcharges<sup>20</sup> about 3 percent of its actual revenue from current surcharges in any given year. However, because the surcharges were rolled into base rates every two years, the cumulative effect of these surcharges is significant. Surcharges accounted for about 36 percent of the total increase in the company's authorized revenues from 1997 to 2010. As of mid-2010, about one fifth of its annual operating revenue could be traced back to their surcharge scheme. <sup>14</sup> This scheme worked to ensure the company's long-term profitability at the expenses of consumers.

#### Inflated Water Bills

The DSIC scheme can overcharge consumers. The surcharge is based on a limited view of utility finances. It increases customer bills to cover the cost and corporate profits associated with certain projects without accounting for and offsetting any decreases in operating expenses that result from those projects. Rehabilitating water pipelines, for example, reduces main breaks, water loss and related costs. <sup>15</sup>

Surcharge schemes inflate a company's allowed return on equity — its profit — by reducing regulatory lag, <sup>16</sup> which is the time between when a corporation makes an investment and when it can start making a return on that investment. Regulators set a utility's authorized return on equity to compensate it for the risks associated with lag, but when surcharges cut lag time, there is not a corresponding decrease in the allowed return.<sup>17</sup> That means consumers continue to pay for business risks that the surcharge removes.

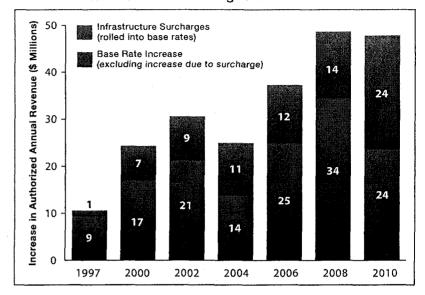
Calculations of infrastructure surcharges also typically overestimate the cost of financing projects at the expense of consumers. These calculations are based on the cost of long-term debt, even though water utilities tend to use cheaper short-term debt to pay for the types of projects funded by the surcharge.<sup>18</sup>

# **Unnecessary Consumer Burden**

The DSIC scheme puts an unjustified financial burden on consumers. Water corporations claim that it is necessary for improving water systems, but as New Jersey's Division of Rate Counsel said, "This argument for an incentive is disingenuous because a utility should not need an extra incentive to fulfill its obligations to provide safe, adequate, and proper service to New Jersey ratepayers." <sup>19</sup>

In other words, the DSIC is an unnecessary special corporate perk that rewards investor owned water utilities for making improvements that they should be making anyway. If the corporations cannot meet their obligations to provide safe and sound water service using standard rate practices, then they should get out of the water business.

# Aqua Pennsylvania's Rate Increase History: How Infrastructure Surcharges Have Inflated Rates



Since the implementation of the infrastructure surcharge in 1997 through mid-2010, Aqua Pennsylvania's authorized revenue has increased by a total of \$224 million, \$80 million of which is from infrastructure surcharges. 14

# The Private Water Industry's "Major Coup"

An industry analyst has called legislative action allowing a DSIC scheme a "major coup,"<sup>21</sup> and another has referred to infrastructure surcharges as "the holy grail" for investor owned water utilities.<sup>22</sup>

Nick DeBenedictis, CEO of Aqua America, attributed his company's stable earnings to infrastructure surcharges,<sup>23</sup> and in 2011, the company focused 44 percent of its planned capital investments on projects covered by them.<sup>24</sup> American Water, another investor owned water utility, sees the surcharge mechanism as part of its strategy to "ensure" long-term profitability.<sup>25</sup> The company expects to eventually recover one-fifth of its capital investments through such schemes. Reducing regulatory lag "boosts the timeliness of earnings," CEO Jeff Sterba explained to Global Water Intelligence. "That's why we're focused on the development of a DSIC-like distribution recovery mechanism in New Jersey."<sup>26</sup>

To date, eight states — Connecticut, Delaware, Illinois, Indiana, Missouri, New York, Ohio and Pennsylvania — permit the use of infrastructure surcharges, and two states — California and New Hampshire — have pilot programs. The industry is aggressively pushing regulators and legislators in other states, particularly New Jersey, to follow suit.

# Stop the Rip-Off

State legislators and regulators should prevent this consumer rip-off. Certainly we must invest in our water distribution systems, but infrastructure surcharges are a false solution

to our infrastructure needs. Infrastructure surcharges are merely moneymaking schemes for private water companies and their Wall Street investors without any consumer benefit. They are clearly not in the public interest. Everyone depends on safe and high-quality water, and it is essential that this shared public resource be regulated for the public good rather than private gain.

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# Origins: "The Nick DeBenedictis Bill"

Pennsylvania was the first state in the country to allow water infrastructure surcharges. In the mid-nineties, during the final hour of a state legislative session, Pennsylvania lawmakers passed a law - tagged onto a piece of legislation that restricted inmate phone calls - that authorized a Distribution System Improvement Charge, The measure was dubbed "the Nick DeBenedictis bill" after the head of the company now called Aqua America. DeBenedictis' company, along with the Pennsylvanian arm of American Water, devised the scheme, and several state politicians credited his lobbying efforts and campaign contributions with the bill's passage. The scheme went into effect at the beginning of 1997.27

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#### For more information:

web: www.foodandwaterwatch.org

email; info@fwwatch.org

phone: (202) 683-2500 (DC) • (415) 293-9900 (CA)

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# ATTACHMENT B

## Jeffery Michlik

From:

Katrin Stukov

Sent:

Wednesday, December 07, 2011 3:36 PM

To:

Jeffery Michlik

Subject:

FW: Follow-up items - Miami water system

FYI

----Original Message----

From: Joe Harris [mailto:jharris@azwater.com] Sent: Thursday, November 24, 2011 7:48 AM

To: Katrin Stukov

Subject: FW: Follow-up items - Miami water system

Katrin, we've been having some problems with our email system. Hopefully, you'll get this one.

Joe

From: Fred Schneider

Sent: Wednesday, November 23, 2011 10:03 AM

To: Katrin Stukov Cc: Joe Harris

Subject: Follow-up items - Miami water system

Katrin,

After our site visit to Miami, there were four things that you wanted me to follow-up on.

- 1. Well No. 8 -
- o Out of Service June 2008
- o Retired Well produced 24 gallons per minute. The well should have been retired in 2008. According to the Company's records, it has not been retired.
- Well No. 17 -
- o Out of Service Pump and motor failed August 2008
- o Well pump and motor replacement is out to bid. The replacement pump and motor will be awarded to the contractor January 2012 as part of the Company's 2012 budget.
- 3. Well No. 22 -
- o Out of Service Pump and motor failed January 2011
- o Retired Well produced 10 gallons per minute and the well has been retired and will be reflected as such in the next Eastern Group rate case.
- 4. Well No. 25 -
- o Out of Service Pump and motor failed March 2010
- o Well pump and motor replacement is out to bid. The replacement pump and motor will be awarded to the contractor January 2012 as part of the Company's 2012 budget.

# ATTACHMENT C



January 4, 2012

Robert W. Geake, Vice President & General Counsel Arizona Water Company 3805 North Black Canyon Highway Phoenix, Arizona 85015-5351 Steven A. Hirsch, Esq.
Stanley B. Lutz, Esq.
BRYAN CAVE, LLP
Two North Central Avenue, Suite 2200
Phoenix, Arizona 85004

Re:

Staff's Second Set of Data Responses to Arizona Water Company

Docket No. W-01445A-10-0517

Dear Mr. Geake and Mr. Hirsch:

Attached are Responses to Arizona Water Company's Second Set of Data Requests to Staff of the Arizona Corporation Commission.

Please contact me if you have any questions at (602) 542-3402.

Sincerely,

Wesley (c. Van Cleve Attorney, Legal Division

WCVC:rbo Atts.

cc: Nancy Scott
Jeffrey Michlik

#### **JANUARY 4, 2012**

## Data Request: AWC 2.1

- Q. On page 21, lines 12-22 of Mr. Michlik's direct testimony, he testifies concerning the alleged "general practice of Staff" and refers to a meeting with Applicant prior to filing this matter where sufficiency issues were discussed. With regard to this testimony, please provide the following:
- a. The specific "general practice" of Staff referred to in the testimony;
- b. Any written policies or procedures of Staff or the Commission relating or referring to such "general practice";
- c. Any governing rule, regulation or statute supporting or addressing such "general practice" and d. Any notice that has been provided to Applicant or similarly-situated utilities of such a "general practice."

#### **RESPONSE:**

- a. As stated on page 21 of Mr. Michlik's direct testimony, lines 14-16, Staff's general practice is "to require a Company to utilize a test year that ideally includes twelve months of actual data with the most current rate in effect; but Staff has found cases sufficient with less."
- b. Staff is not aware of any such written policies or procedures. However, in Mr. Michlik's five plus years at the Commission, it has been the practice of Staff to require a test year with no less than six months of actual data with the most current rates in effect. Further, while Staff may not have a written policy, this practice is supported by a number of authoritative references consistently used by Staff, including: American Water Works Association, Principles of Water Rates, Fees, and Charges, Manual of Water Supply Practices, definition of a historical test year; Charles F. Phillips, Jr., The Regulation of Public Utilities: Theory and Practice, selection of a test year
- c. Although not an attorney, it is Mr. Michlik's lay understanding that the following rulings support such a general practice: A.A.C. R14-2-103(A)(3) (i), (p); and Ariz. Corp. Comm'n v. Ariz. Pub. Serv., 113 Ariz. 368, 370-71, 555 P.2d 326, 328-29 (1976). (For additional explanation, see Staff's Response to Arizona Water Company's Motion for Procedural Order Regarding Sufficiency of Application, filed in this docket on Feb. 23, 2011.
- d. Since the inception of the current version of the rate case management rule (1992), Staff has generally not found a rate case application sufficient with less than six months of actual test year data with current rates in effect. This in and of itself provides strong notice to any and all utilities of Staff's general practice, particularly to those very large utilities like the Company which conduct business at the Commission on an ongoing basis and follow fairly closely the views and practices of the Commission and its Staff. More specifically, this issue was addressed recently in Docket No. E-01345A-08-0172 for Arizona Public Service and Docket No. G-04204A-08-0105 for UNS Gas.

RESPONDENT: Jeffrey Michlik

## **JANUARY 4, 2012**

#### Data Request: AWC 2.2

- Q. On page 22, lines 23-26 of Mr. Michlik's direct testimony, he testifies concerning Staff's conclusion that the Company should not be entitled to recover any of its expenses regarding the filing of its amended application. With regard to this testimony, please provide the following:
- a. The amount or a description of the nature of the specific rate case expenses that Staff contends should be excluded from recovery;
- b. The bases for Staffs calculation of the amount identified in response to 2(a), above; and
- c. All basis, support or justification for Staffs belief as expressed in Mr. Michlik's referenced testimony.

#### **RESPONSE:**

- a. Staff's calculation is based on the change between the estimated rate case expense in the original application and the amended filing.
- b. See a.
- c. See the testimony of Mr. Michlik.

RESPONDENT: Jeffrey Michlik

#### **JANUARY 4, 2012**

## Data Request: AWC 2.3

- Q. On page 25, lines 7-1 1 of Mr. Michlik's direct testimony, he testifies concerning consolidation and rate case expense. With regard to this testimony, please provide the following:
- a. The place, date and time of the referenced discussion;
- b. The names of each person who participated in, attended or overheard the discussion;
- c. The exact content of the message communicated in the discussion, broken out by which person said what; and
- d. A copy of all notes, memoranda, and summaries of such discussions made by or in the possession of each person identified in 3(c), above.

#### **RESPONSE:**

- a. This meeting was convened at the request of the Company. It was held December 22, 2010, at 9:00 a.m., in the Director's Office Conference Room at the Commission's Offices at 1200 W Washington, Phoenix, AZ.
- b. To the best of Staff's knowledge and recollection, in addition to the representatives from the Company, the persons present from Staff were Steve Olea, Eli Abinah, Nancy Scott, Gordon Fox, Darron Carlson, Del Smith, and Connie Walczak.
- c. To the best of Staff's knowledge and recollection, the Company representatives made the following statements to Staff: 1) a rate application for the western group would be filed by the end of the year; 2) the consolidation study was previously filed in September; 3) the test year would be 2009 with a pro forma adjustment for new rates; 4) the application would include an early version of the water loss report due next year; 5) the application would include a DSIC study and proposal for a DSIC for certain systems; 6) the application would include a request for continuation of the ACRM and a request for a HUF tariff as the Company plans to construct new water treatment facility; 7) there would be no new adjustors proposed except for a MAP surcharge; 8) the Company would be using the same cost of service study as in the previous rate case; 9) there would be a request to include PTY plant; and 10) the Company further intends to file a rate application for each of its groups, in succession, and so there may be some overlap in the processing.

In addition to asking questions, to which some of the statements above were responses, Staff (Mr. Olea) stated: 1) due to limited resources, to process more efficiently, Staff would prefer that rate applications for all systems be filed together; however, it is ultimately the Company's decision; 2) if the Company were to file the application using a 2009 test year with no data under the current rates, Staff would almost certainly find it deficient; and 3) the Company should delay filing a rate application and use a 2010 test year that incorporates at least six months data under the new rates.

#### **JANUARY 4, 2012**

d. Copies of any notes retained by Staff participants are attached. Further references to this meeting include:

"Consistent with the preliminary opinion expressed in our meeting with you on December 22, 2010, Staff is specifically concerned that the test year provided in support of the application does not meet the requirements of A.A.C. R14-2-103(A)(3)(p)." Letter of Deficiency issued Jan. 7, 2011.

"I guess the frustration that Staff has with this case is — and again, unfortunately with the legal department, we tend not to get involved in cases during the sufficiency phases — but it's my understanding that there was a meeting between the Utilities Division and the company prior to it filing its rate case where the company had indicated that it was going to be filing a rate case using this type of test year. And it's my understanding that the discussions that took place in that meeting were that they should not file the application; they should wait until they have some amount of actual, current rates in effect during the test year and file it at that point. And despite that meeting with the Utilities Division, the company at some point after that meeting went ahead and filed the application." Statement by Staff Attorney Wesley Van Cleve, Proc. Conf., Mar. 24, 2011, Tr. at 8:10-25.

RESPONDENT: Nancy Scott

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Meeting - AWC-NXT WTR RATEGE TOTAL CO. 8/25/09 WITY 2009 Bru Garfull Fred. (note loss) Western Group (ON4) - ACRM - CCO-C + Rind Will White Tank plannilfac. (Bubec) \* X NOT Sky adjustors \*\* I will near 6 mes of new rotes in Ty as it stands they will how -0-Joel is projecting the nates Reasons for dres \* Declary Sollo O+MCost \* NOT even thinking alit Alabacide Consolidation die cultimat ROE Component

ATTACHMENT RESPONSE TO AWC2.3

## **JANUARY 4, 2012**

# Data Request: AWC 2.4

Q. Please provide a citation to, or a copy of, any Commission rule, regulation, written policy or decision that prescribes or requires that a rate application must include a minimum of six months of revenues under current rates as a condition of sufficiency under Rule 14-2-103.

#### **RESPONSE:**

See the responses to 2.1 (b) and (c) above.

RESPONDENT: Nancy Scott

### **JANUARY 4, 2012**

### Data Request: AWC 2.5

- Q. Please confirm or deny that, in the Company's last rate case, Docket No. W-01445A-08-0440:
- a. The Company did not request an amount of rate case expense specific to its Western Group systems.
- b. In Decision No. 71845, the Commission approved an amount of rate case expense for the total Company.

### **RESPONSE:**

- a. Confirm. However, Staff assumed the Western Group, along with the Northern Group, and Eastern Group was included in the \$500,000 that the Company requested in its last rate case.
- b. Confirm. However, Staff assumes that a portion of this amount included rate case expense associated with the Western Group.

RESPONDENT: Jeffrey Michlik

### **JANUARY 4, 2012**

Data Request: AWC 2.6

Q. Please confirm or deny that that Company's use of a calendar year 2010 test year in its amended application was part of a settlement with Staff following the opening of the oral argument of the Company's motion identified on page 22, line 1 of Mr. Michlik's direct testimony, at the suggestion of ALJ Sarah Harpring.

**RESPONSE:** 

Deny. Staff did not enter into any formal settlement negotiations with the Company. At the referenced procedural conference, Judge Harpring indicated that her opinion at that time was that, unless the parties first reached a resolution of the dispute, she would issue a Recommended Opinion and Order for the Commission's consideration at a regular open meeting, which would entail additional delay in the case. Proc. Conf., Mar. 24, 2011, Tr. at 10:7-12. Judge Harpring then provided the parties an opportunity to discuss a resolution in order to avoid such delay. Id. at 12:16-14:7. Subsequent to the discussion, the Company agreed to resubmit the application incorporating six months of actual data under current rates. Id. at 16:13-19. Such a revised filing would be consistent not only with Staff's general practice but with Staff's position as stated to the Company in the meeting prior to the filing of the deficient application. To the extent Staff did enter into some sort of an informal understanding with the Company it was only to process the Company's rate application(s) as Staff is required to do pursuant to the Arizona Administrative Code, the Arizona Constitution, and Staff's general practice.

RESPONDENT:

Nancy Scott

### **JANUARY 4, 2012**

## Data Request: AWC 2.7

- Q. Please confirm or deny that the Company:
- a. Requested \$500,000 in rate case expense in its rate case in Docket No. W-0 1 445A-08-0440.
- b. Did not request \$176,350 (or any other specific amount) of rate case expense for its Western Group in Docket No. W-01445A-08-0440.

### **RESPONSE:**

- a. Confirm. See response to 2.5.
- b. Confirm. See response to 2.5.

RESPONDENT: Jeffrey Michlik

### **JANUARY 4, 2012**

### Data Request: AWC 2.8

- Q. Please provide a copy, and identify the preparer(s) of any Staff notes, memoranda or work papers or testimony, that form the bases for, or present a contention that rate consolidation:
- a. Is beneficial only to total Company rate applications;
- b. Is beneficial only to Company group rate applications; and
- c. Is limited to total Company rate applications only or to Company rate applications for groups only.

### **RESPONSE:**

- a. Staff is not sure where this reference is from and therefore does not have any of the documents the Company is requesting. Staff supports the Company pursuing full consolidation in gradual steps.
- b. See a.
- c. See a.

RESPONDENT: Jeffrey Michlik

### **JANUARY 4, 2012**

### Data Request: AWC 2.9

- Q. Concerning Staff Witness Jeffrey Michlik's testimony and recommendation concerning the cost of capital in the Company's Western Group case, please provide:
- a. A copy of any document referenced in the testimony or relied on in preparing the testimony, other than documents provided by Arizona Water Company;
- b. A copy of all reports, studies, work papers, and other supporting documents that relate to the testimony;
- c. An electronic copy in Microsoft Excel format with all formulae intact, of all work papers provided in response to subpart b. above.

### RESPONSE:

- a. A copy of the cases referenced in Mr. Michlik's testimony can be located through e-Docket on the Corporation Commission's website.
- b. See a.
- c. See a.

RESPONSE: Jeffrey Michlik

SURREBUTTAL TESTIMONY OF Jeffrey M. Michlik

### TABLE OF CONTENTS TO SCHEDULES

SCH#	TITLE
JMM-1	REVENUE REQUIREMENT
JMM-2	GROSS REVENUE CONVERSION FACTOR
JMM-3	RATE BASE - ORIGINAL COSTS
JMM-4	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
JMM-5	ORIGINAL COST RATE BASE ADJUSTMENT # 1 - OUT OF SERVICE PLANT AND RUCO RATE BASE ADJUSTMENT
JMM-6	ORIGINAL COST RATE BASE ADJUSTMENT # 2 - NOT USED
JMM-7	ORIGINAL COST RATE BASE ADJUSTMENT # 3 - CASH WORKING CAPITAL
JMM-8	OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND STAFF RECOMMENDED
JMM-9	SUMMARY OF OPERTING INCOME STATEMENT ADJUSTMENTS - TEST YEAR
JMM-10	OPERTING INCOME ADJUSTMENT # 1 - REVERSE UNBILLED EXPENSES
JMM-11	OPERTING INCOME ADJUSTMENT # 2 - FLEET FUEL EXPENSE
JMM-12	OPERTING INCOME ADJUSTMENT # 3 - REMOVAL OF PROJECTED EXPENSES
JMM-13	OPERTING INCOME ADJUSTMENT # 4 - RUCO MISCELLANEOUS EXPENSES
JMM-14	OPERTING INCOME ADJUSTMENT # 5 - REMOVAL OF ADDITIONAL BMP EXPENSES
JMM-15	OPERTING INCOME ADJUSTMENT # 6 - RATE CASE EXPENSE
JMM-16	OPERTING INCOME ADJUSTMENT # 7 - DEPRECIATION EXPENSE
JMM-17	OPERTING INCOME ADJUSTMENT # 8 - INCOME TAX EXPENSE
JMM-18	OPERTING INCOME ADJUSTMENT # 9 - PROPERTY TAX EXPENSE

Surrebuttal Schedule JMM-1

# REVENUE REQUIREMENT

(B) STAFF FAIR VALUE	\$ 50,120,955	\$ 2,855,949	9.70%	8.1%	\$ 4,059,797	\$ 1,203,848	1.6590	\$ 1,997,217	\$ 15,056,166	\$ 17,053,383	13.27%	
(A) COMPANY FAIR VALUE	50,574,693	2,562,892	5.07%	9.72%	4,914,647	2,351,755	1.6560	3,894,582	15,056,166	18,950,748	25.87%	
	↔	↔			<del>69</del>	↔		<del>69</del>	<del>⇔</del>	↔		
DESCRIPTION	Adjusted Rate Base	Adjusted Operating Income (Loss)	Current Rate of Return (L2 / L1)	Required Rate of Return	Required Operating Income (L4 * L1)	Operating Income Deficiency (L5 - L2)	Gross Revenue Conversion Factor	Required Revenue Increase (L7 * L6)	Adjusted Test Year Revenue	Proposed Annual Revenue (L8 + L9)	Required Increase in Revenue (%)	References: Column (A): Company Schedule A-1 Column (B): Staff Schedules JMM-3 and JMM-7
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### GROSS REVENUE CONVERSION FACTOR

LINE NO.		(A)	(B)	(C)	(D)
1 2 3 4 5	Calculation of Gross Revenue Conversion Factor: Revenue Uncollecible Factor (Line 11) Revenues (L1 - L2) Combined Federal and State Income Tax and Property Tax Rate (Line 23) Subtotal (L3 - L4) Revenue Conversion Factor (L1 / L5)	100.0000% 0.0000% 100.0000% 39.7237% 60.2763% 1.659027			
8 9 10	Calculation of Uncollecttible Factor. Unity Combined Federal and State Tax Rate (Line 23) One Minus Combined Income Tax Rate (L7 - L8) Uncollectible Rate Uncollectible Factor (L9 * L10)	100.0000% 38.5989% 61.4011% 0.0000%		Ÿ	
13 14 15 16	Calculation of Effective Tax Rate:  Operating Income Before Taxes (Arizona Taxable Income)  Arizona State Income Tax Rate Federal Taxable Income (L12 - L13)  Applicable Federal Income Tax Rate (Line 55)  Effective Federal Income Tax Rate (L14 x L15)  Combined Federal and State Income Tax Rate (L13 +L16)	100.0000% 6.9680% 93.0320% 34.0000% 31.6309%	38.5989%		
19 20 21 22	Calculation of Effective Property Tax Factor Unity Combined Federal and State Income Tax Rate (L17) One Minus Combined Income Tax Rate (L18-L19) Property Tax Factor (JMM-17, L27) Effective Property Tax Factor (L20*L21) Combined Federal and State Income Tax and Property Tax Rate (L17+L22)	100.0000% 38.5989% 61.4011% 1.8320%	1.1248%	39.7237%	
24 25 26	Required Operating Income (Schedule JMM-1, Line 5) AdjustedTest Year Operating Income (Loss) Required Increase in Operating Income (L24 - L25)	\$ 4,059,797 2,855,949	1,203,848		
28	Income Taxes on Recommended Revenue (Col. [E], L52) Income Taxes on Test Year Revenue (Col. [B], L52) Required Increase in Revenue to Provide for Income Taxes (L27 - L28)	\$ 1,512,373 755,592	756,781		
32 33	Recommended Revenue Requirement (Schedule JMM-1, Line 10) Uncollectible Rate (Line 10) Uncollectible Expense on Recommended Revenue (L30*L31) Adjusted Test Year Uncollectible Expense Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)	\$ 17,053,383 0.0000% \$ - \$ -	-		
36 37	Property Tax with Recommended Revenue (JMM-17, Col B, L31) Property Tax on Test Year Revenue (JMM-17, Col A, L17) Increase in Property Tax Due to Increase in Revenue (L35-L36) Total Required Increase in Revenue (L26 + L29 + L34 + L37)	\$ 864,054 827,466	36,588 1,997,217		
40 41 42 43 44 45 46 47 48 49 50 51	Calculation of Income Tax:  Revenue (Schedule JMM-7, Col. [C], Line 5 & Sch. JMM-1, Col. [D] Line 10)  Operating Expenses Excluding Income Taxes  Synchronized Interest (L56)  Arizona Taxable Income (L39 - L40 - L41)  Arizona State Income Tax Rate  Arizona Income Tax (L42 x L43)  Federal Taxable Income (L42 - L44)  Federal Tax on First Income Bracket (\$1 - \$50,000) @ 34%  Federal Tax on Third Income Bracket (\$51,001 - \$75,000) @ 34%  Federal Tax on Fourth Income Bracket (\$75,001 - \$100,000) @ 34%  Federal Tax on Firth Income Bracket (\$100,001 - \$335,000) @ 34%  Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34%  Total Federal Income Tax  Combined Federal and State Income Tax (L44 + L51)	Test Year \$ 15,056,166 \$ \$ 11,444,625 \$ 1,653,992 \$ 1,957,550 6,9680% \$ 136,402 \$ 1,821,148 \$ 17,000 \$ 8,500 \$ 8,500 \$ 79,900 \$ 505,290 \$ 619,190 \$ 755,592	1,997,217	Staff Recommended \$ 17,053,383 \$ 11,481,213 \$ 1,653,992 \$ 3,918,179 \$ 8,9680% \$ 273,019 \$ 3,645,160 \$ 17,000 \$ 8,500 \$ 79,900 \$ 1,125,455 \$ 1,239,355 \$ 1,512,373	
53	Applicable Federal Income Tax Rate [Col. [E], L51 - Col. [B], L51] / [Col. [E], L45	- Col. [B], L45]		34.0000%	
55	Calculation of Interest Synchronization: Rate Base (Schedule JMM-3, Col. (C), Line 17 Weighted Average Cost of Debt Synchronized Interest (L45 X L46)	\$ 50,120,955 3.3% \$ 1,653,992			

### RATE BASE - ORIGINAL COST

		(A) COMPANY	(B)		(C) STAFF
LINE		AS	STAFF	Adj.	AS
<u>NO.</u>		<u>FILED</u>	<u>ADJUSTMENTS</u>	<u>No.</u>	 ADJUSTED
1 2	Plant in Service Less: Accumulated Depreciation	\$ 114,351,349 27,844,496	\$ (128,675)	1 1	\$ 114,222,674 27,844,496
3	Net Plant in Service	\$ 86,506,853	\$ (128,675)		\$ 86,378,178
4 5 6	<u>LESS:</u>				. 2003. 12
7	Contributions in Aid of Construction (CIAC)	\$ 20,165,452	\$ -		\$ 20,165,452
8	Less: Accumulated Amortization	2,561,377			\$ 2,561,377
9	Net CIAC	17,604,075			\$ 17,604,075
10					
11	Advances in Aid of Construction (AIAC)	11,305,977	-		11,305,977
12					
13	Customer Deposits	322,847	-		322,847
14					
15	Deferred Income Tax Credits	7,267,953	-		7,267,953
16					
17					
18	ADD:				
19					
20					
21	Working Capital	1,016,691	(325,062)	2	691,629
22					
23	Deferred Regulatory Assets	(448,000)	-		(448,000)
24					
25	0.1.1.10100	A 50 574 000	A (450 760)		 <u> </u>
26	Original Cost Rate Base	\$ 50,574,693	\$ (453,738)		\$ 50,120,955

### References:

Column [A]: Company as Filed Column [B]: Schedule JMM-4

Column (C): Column (A) + Column (B)

Arizona Water Company - Supersition (Apache Junction, Superior, Miami) Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

[E] STAFE	ADJUSTED		187	7,940	793,568	153,814	1,526,600	6,635,805	18,910	9.848.582	163	811	49,586	10,187,393	4 947 247	53,612,436	756,878	13,475,428	2,027,498	3,697,873	910.993	1.291,792	1,856,199	16,284	523,896	87,830	1,102,638	98,397	444 900 674	114,222,814	114,222,674	27 844 496	1	86,378,178		20,165,452		17,604,075	11,305,977	7,267,953	!		691,629	(448,000)	50 120 955	
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<u> </u>	ADJ #2	Not Used Ref: Sch JMM-6	€9																						-						69			es		69									6	Ą
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[8]	ADJ #1 Out of Serice Plant &	RUCO Adjustment Ref: Sch JMM-5	1	. ;	•	1	, !	(37,873)	- (672)	(2/6) 26 039	5 '	•		(82,867)	764	(35,367)	,	1	•	•	1		1	•	(7,324)	•	8.525	-			(128,676)	,		(128,676)		•	•		•				ľ	'	(479 676)	7,021,
	Out of S	RUCO Ref: S	<del>69</del>																												49			မှ		65	<b>&gt;</b>								6	<i>A</i>
		<u>`</u> □	187	6,869	793,568	153,814	1,526,600	6,673,678	18,910	293,831	163	811	49,586	10,270,259	185,215	4,940,463 53 647 804	756,878	13,475,428	2,027,498	3,697,873	54,061	910,993	1,856,199	16,284	531,220	87,830	44,523	98,397		114,351,349	114,351,349	907 77	064,440,12	86,506,853		20 165 452	2,561,377	17,604,075	11,305,977	322,847 7,267,953	226, 10		1018 801	(448,000)	200	50,574,693
₹		COMPANY AS FILED	69		3/	#	1,52	9'9	```č	7 8	5		`	10,27	2 6	53.6	12	13,4	2,0	39.6	~ ć	7		•	Ω			2		114,3	\$ 114,3	9 7.0	0,12	\$ 86,5		20.1	•	17,6	11,3	2 7	-		,	. <b>2</b>		20.5
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		ij	Organization Cost	Franchise Cost	Otner Intanglotes Water Rights	Other Source of Supply Land	Wells - Other	Wells	Pumping Plant Land	Pumping Plant Structures & Improvements	Electric Pumping Equipment Gas Engine Equipment	Sas Linguie Lycipinein Water Treatment Plant - Land	/ater Tru	Water Treatment Equipment	Transmission and Distribution - Land	Storage Lanks Transmission and Distribution Mains	Fire Sprinkler Taps	Services	Meters	Hydrants	General Plant Land	General Plant Structures	Ceaseriold Improvements Office Furniture & Faultoment	Warehouse Equipment	Tools, Shops, and Garage Equipment	Laboratory Equipment	Power Operated Equipment	Miscellaneous Equipment	Intentionally Left Blank		in Serv		ımulate	n Servic			cumulat	Net CIAC (L25 - L26)	in Aid o	Deposi	ncolrie		7	apital Regulato		ost Ra
	ACCT.	PLANT IN SERVICE 1			303						325 E					342					_	330						398 N			Total Plant in Service		Less: Accumulated Depreciation	Net Plant in Service	ć	LESS:	ontributions in Ald of Corestaction Less: Accumulated Amortization	Net CL	Advances in Aid of Construction (AIAC)	Customer Deposits	Deferred Income Laxes		ADD:	vvorking Capital Deffered Regulatory Assets		Original Cost Rate Base
	LINE NO. NO	ANTIN		e .	4 n						11 3					17			21 3			24								34			99 98 98				44 44 Co				48 49 De	50			24	
	크	집 `	. •							τ,			~	τ-	Ψ.	v~ <del>V</del>	_	"	.,	. 4			• "			. 4			•••		,	•••		. •	-	•	. *	7	•		. •					

### RATE BASE ADJUSTMENT NO. 1 - OUT OF SERVICE PLANT AND RUCO RATE BASE ADJUSTMENT

			 [A]		[B]	[C]
LINE	ACCT		COMPANY	Π	STAFF	 STAFF
NO.	NO.	DESCRIPTION	PROPOSED		ADJUSTMENTS	RECOMMENDED
1	314	Wells	\$ 6,673,678	\$	(37,873)	\$ 6,635,805
2	321	Pumping Plant Structures	293,831		(572)	293,259
3	325	Electric Pumping Equipment	 9,822,543		(8,445)	 9,814,098
4			\$ 16,790,052	\$	(46,890)	\$ 16,743,162
5						
6		Accumulated Depreciation	\$ 27,844,496	\$	(46,890)	27,797,606
7		·				
8	RUCO A	ADJUSTMENT				
9	325	Electric Pumping Equipment	\$ 9,822,543	\$	34,484	\$ 9,857,027
10	332	Water Treatment Equipment	10,270,259		(82,867)	10,187,393
11	342	Storage Tanks	4,946,483.00		763.59	4,947,247
12	343	Transmission and Distribution Mains	53,647,804		(35,367)	53,612,436
13	397	Communications Equipment	1,094,113		(565)	1,093,548
14		, , ,	\$ 79,781,202	\$	(83,551)	\$ 79,697,651
15			 			
16	Phoenix	Meter Shop				
17	394	Tools, Shops, and Garage Equipment	\$ 531,220	\$	(7,324)	\$ 523,896
18	397	Communications Equipment	1,094,113		9,090	 1,103,203
19		•	\$ 1,625,333	\$	1,766	\$ 1,627,099

REFERENCES:
Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

Surrebuttal Schedule JMM-6

Arizona Water Company - Supersition (Apache Junction, Superior, Miami) Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

RATE BASE ADJUSTMENT NO. 2 - NOT USED

### RATE BASE ADJUSTMENT NO. 3 - CASH WORKING CAPITAL

				[A]	[B]	[C]	[D]	(E)	[F]
LINE	ACCT			COMPANY	STAFF	STAFF	1		
NO.	NO.	DESCRIPTION	F	ROPOSED	ADJUSTMENTS	RECOMMENDED	[		
1	1	Working Capital	\$	1,016,691	\$ (325,062)	\$ 691,629	_		
2							•		
3									
4									
5				Test Year			Net	Lead / Lag	Working Cash
6				Adjusted	Revenue	Expense	Lag Days	Factor	Requirement
7				Results			[B - C]	[D + 365]	[AXE]
8	Staff's C	alculation							
9	Purchase	ed Power	\$	1,425,047	29.53	30.87	(1.34)	(0.0037)	\$ (5,224)
10	Payroll			2,662,431	29.53	14.00	15.53	0.0426	113,296
11	Purchase	ed Water		691,466	29.53	(40.09)	69.62	0.1907	131,894
12	Chemica	ls		130,705	29.53	(18.11)	47.64	0.1305	17,060
13		& Liability Insurance		158,734	29.53	(45.27)	74.80	0.2049	32,530
14	Workman	n's Compensation Insurance		36,305	29.53	(46.50)	76.03	0.2083	7,563
15	Health In			481,608	29.53	(8.92)	38.45	0.1053	50,736
16		kM (Excluding Rate Case Expense)		1,797,731	29.53	(9.27)	38.80	0.1063	191,111
17	Federal I	ncome Taxes		1,239,355	29.53	37.00	(7.47)	(0.0205)	(25,358)
18	State Inc	ome Taxes		273,019	29.53	37.00	(7.47)	(0.0205)	(5,586)
19	FICA Tax	(es		199,553	29.53	14.00	15.53	0.0426	8,492
20	FUTA & S	SUTA Taxes		6,196	29.53	83.10	(53.57)	(0.1468)	(909)
21	Property			864,054	29.53	212.00	(182.47)	(0.4999)	(431,951)
22	Registrat	ion, Svc. Contracts, & Misc. Fees		153,893	29.53	(98.83)	128.36	0.3517	54,120
23	Retireme	nt Annuities (401k)		246,884	29.53	34.72	(5.19)	(0.0142)	(3,509)
24									
25									
26			\$	10,366,980	<del></del> -			·	\$ 134,265
27		Subtotal							
28									
29	Interest E	xpense		1,692,249	29.53	91.25	(61.72)	(0.1691)	(286,143)
30	Cost of E	quity		-	-	-	-	-	-
31									
32		Subtotal	\$	1,692,249					\$ (286,143)
33									
34									
35		Total		12,059,230					\$ (151,878)
36									
. 37	Company	Cash Working Capital							\$ 173,185
38									
39	Increase/	(Decrease)						-	\$ (325,062)

REFERENCES:
Column [A]: Company Filing
Column [B]: Direct Testimony JMM
Column [C]: Column [A] + Column [B]

### OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND STAFF RECOMMENDED

		[A] COMPANY	[B]	[C] STAFF	[D]	· [E]
		ADJUSTED	STAFF	TEST YEAR	STAFF	
LINE		TEST YEAR	TEST YEAR	AS	PROPOSED	STAFF
<u>NO.</u>	DESCRIPTION	AS FILED	<u>ADJUSTMENTS</u>	<u>ADJUSTED</u>	<u>CHANGES</u>	RECOMMENDED
1	OPERATING REVENUES:					
2	Residential	\$ 11,436,591	s -	\$ 11,436,591	\$ 1,997,217	\$ 13,433,808
3	Commercial	2,606,553	•	2,606,553	•	2,606,553
4	Industrial	70,149	-	70,149	•	70,149
5	Private Fire Service	51,199		51,199		51,199
6	Other Water Revenues	166,218	-	166,218		166,218
7	Total Water Revenues	\$ 14,330,710	\$ -	\$ 14,330,710	\$ 1,997,217	\$ 16,327,927
8						
9	Miscellaneous	725,456.25		725,456.25		725,456
10	Total Operating Revenues	\$ 15,056,166	\$	\$ 15,056,166	\$ 1,997,217	\$ 17,053,383
11						
12	OPERATING EXPENSES:					
13	Source of Supply Expenses				_	
14	Purchased Water	\$ 691,466	\$ -	\$ 691,466	\$ -	\$ 691,466
15	Other	73,495	(608)	72,887	-	72,887
16	Pumping Expenses					
17	Purchased Power	1,424,839	208	1,425,047	-	1,425,047
18	Purchased Gas				-	
19	Other	553,472	(16,525)	536,947	•	536,947
20	Water Treatment Expenses	597,301	(1,053)	596,249	•	596,249
21	Transmission and Distribution Expenses	1,742,369	(390,236)	1,352,133	-	1,352,133
22	Customer Accounting Expenses	1,182,195	(14,841)	1,167,354	-	1,167,354
23	Sales Expense	0.000.057	(89,275)	2,001,082	-	2,001,082
24	Administrative and General Expenses	2,090,357		7,843,165		7,843,165
25 26	Total Operation and Maintenance Expense	8,355,495	(512,330)	7,043,103	•	7,043,105
26 27	Depreciation and Amortization Expenses	2,672,715	(69,207)	2,603,508		2,603,508
28	Depreciation and Amortization Expenses	2,072,713	(09,207)	2,000,000		2,000,000
29	Taxes					
30	Federal Income Taxes	448,513	170,678	619,190	620,164	1,239,355
31	State Income Taxes	98,803	37,599	136,402	136,617	273,019
32	Property Taxes	747,264	80,202	827,466	36,588	864,054
33	Other	170,486		170,486	-	170,486
34	Total Taxes	1,465,065	288,479	1,753,544	793,369	2,546,913
35	Total I divide	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-	•	•	-
36		-	-	-	-	-
37	Total Operating Expenses	12,493,275		12,200,217	793,369	12,993,586
38	- L - 200 Q 1 1 1			· · · · · · · · · · · · · · · · · · ·		
39	Operating Income (Loss)	\$ 2,562,892	\$ 293,058	\$ 2,855,949	\$ 1,203,848	\$ 4,059,797

References:
Column (A): Company Schedule C-1
Column (B): Schedule JMM-9
Column (C): Column (A) + Column (B)
Column (D): Schedules JMM-17 and JMM-18
Column (E): Column (C) + Column (D)

Arizona Water Company - Supersition (Apache Junction, Superior, Miami) Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

	₹	[8]	ij	[0]	Ē	E	15	Ξ	Ε	5	:
_		Reverse Unbilled	Floot Fire	Removal of Pumping		Removal of	Ξ.	Ξ	Ξ	2	₹.
NO. NO. DESCRIPTION	COMPANY	Expenses	Expense	Projection	Expense Adjustment	BMP Expense	Rate Case Expense	Depreciation Expense	Income Tax	Property	STAFF
1 OPERATING REVENUES:		Ref. Sch JMM-10	Ref. Sch. IMM.11	Pof. Sch MM 12	ADJ #4	-		ADJ #7	ADJ #8	ADV#9	ADJUSTED
2 Residential	\$ 11,436,591			The state of the s	Net. OCH JMM-13	Ref. Sch JMM-14 Re	Ref: Sch JMM-15 Re	Ref: Sch JMM-16	4-17	Ref: Sch JMM-18	
3 Commercial	2,606,553	•		• '	•			1		\$	11,436,591
4 Industrial	70,149	•	•	•	•	,			•	•	2,606,553
5 Private Fire Service	51,199		•	•		•		•	•		70.149
6 Other Water Revenues	168,218	•	•	,		•					51,199
7 Total Water Revenues	\$ 14,330,710 \$					9			-	•	166,218
o Miscallanana	-					•	,	•			14,330,710
10 Total Operation Personne	004,027									•	
	\$ 12,026,165			\$		5				\$	1
12 OPERATING EXPENSES:								-			15,056,166
							•	•			
	\$ 691,466	•	•		•		*	•	•	•	•
	73,495	(454)	(154)	•	•	•			,		691.466
16 Pumping Expenses			•			,	•	•		•	72 887
	1,424,839	.208		•				•	•		<u> </u>
		•	•	' '	l	,	•	•	•		1 425 047
	553,472	(5,867)	(1,559)	(660 6)	•	•	,	•			
	597,301	(269)	(484)	(age's)	•	•	į	•	•		536 947
21 Transmission and Distribution Expenses	1.742,369	(14.469)	(5.090)	1979 0707	•	•	í		•	•	506 240
	1,182,195	(13.469)	(1372)	(919,916)	•	•	•	•	•	,	1 252 133
23 Sales Expense	•	(contact)	(7/0')	•	•	,		•			1 457 754
24 Administrative and General Expenses	2 090 357	471.77	***	•	•	•	,		•		+cc, 'o', '
25 Total Operation and Maintenance Expense	8 B 355 405 C	(41 909)			(7,522)		(67,128)	•		1	
		(050'14)	e (/cl/8)	\$ (918,718)		4	(67,128) \$	\$			2,001,082
27 Depreciation and Amortization Expenses	2 672 715							•	•	•	691,640,
			•	•	•	•	•	(69,207)	•		000
29 Taxes									•		2,503,508
30 Federal Income Taxes	448 513							•	•		
31 State income Taxes	0.0,017 803		•	•		•		•	170 678	•	667
	243.064	•		•	•		•		00,00	•	081,810
33 Other	407'/4/		ı	•	•	•		•	SSC'/S	. :	136,402
Total Te		,	•		•	•		•		80,202	827,466
35	\$ 1,465,065 \$	•	•		*	6					170,486
36 Total Operating Expenses	£ 12 403 275 €	(44 909)					•	•	208,276	80,202 \$	1,753,544
37	\$ 617,001,21	(050'14)	¢ (/CL'A)	(379,775) \$	(7,522) \$	\$ (6,850) \$	(67,128) \$	(69,207) \$	208.276	\$ 80.202 \$	12 200 217
38 Operating Income (Loss)	\$ 2,562,892 \$	41.898	\$ 0157 \$	377.07.0		,	6	,			117,007,21
					7,522	\$ 6,850 \$	67.128 \$	69.207	(208 27E)	יבייניים/	

### OPERATING INCOME ADJUSTMENT NO. 1 - UNBILLED EXPENSES

	·		[A]		[B]		[C]
LINE			COMPANY		STAFF		STAFF1
NO.	DESCRIPTION	i	PROPOSED	Α	DJUSTMENTS	RE	COMMENDED
1	Residential	\$	11,436,591	\$	-	\$	11,436,591
2	Commercial		2,606,553		-		2,606,553
3	Industrial		70,149		<u>-</u>		70,149
4	Revenue Adjustments	\$	14,113,293	\$	-	\$	14,113,293
5				-			
6	Source Supply - Other	\$	73,041	\$	-	\$	73,041
7	Unbilled Expenses		454		(454)		<b>-</b>
8	Total Source Supply - Other	\$	73,495	\$	(454)	\$	73,041
9							
10	Purchased Power	\$	1,425,047	\$	-	\$	1,425,047
11	Unbilled Expenses	•	(208)	-	208		0
12	Total Purchased Power	\$	1,424,839	\$	208	\$	1,425,047
13							
14	Pumping Expense - Other	\$	547,605	\$	-	\$	547,605
15	Unbilled Expenses	•	5,867		(5,867)		(0)
16	Total Pumping Expense - Other	\$	553,472	\$	(5,867)	\$	547,605
17							
18	Water Treatment Expenses	\$	596,733	\$	-	\$	596,733
19	Unbilled Expenses	•	569	•	(569)	•	-
20	Total Water Treatment Expenses	\$	597,301	\$	(569)	\$	596,733
21							
22	Transmission and Distribution Expenses	\$	1,727,900	\$	-	\$	1,727,900
23	Unbilled Expenses	*	14,469	-	(14,469)	•	-
24	Total Transmission and Distribution Expenses	\$	1,742,369	\$	(14,469)	\$	1,727,900
25	•						
26	Customer Accounting Expenses	\$	1,168,726	\$	-	\$	1,168,726
27	Unbilled Expenses	•	13,469	•	(13,469)	•	
28	Total Customer Accounting Expenses	\$	1,182,195	\$	(13,469)	\$	1,168,726
29	, and a decision of the control of t	<del></del>					
30	Administrative and General Expenses	\$	2,083,080	\$	_	\$	2,083,080
31	Unbilled Expenses	Ψ	7,277	•	(7,277)	*	_,,
32	Total Administrative and General Expenses	\$		\$	(7,277)	\$	2,083,080
33	. Julia - Igrian notice to constant Expenses	<u> </u>	_,000,001		<u> </u>	<del></del> -	
33 34	Total Expense Adjustments	\$	7,664,029	\$	(41,898)	\$	7,622,131
54	rotal Exponse Aujustinents	<del></del>	1,004,025	*	\_,,,000/	Ě	.,,,,,,,,

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References: Column (A), Company Schedule C-1 Column (B): Testimony JMM Column (C): Column (A) + Column (B)

### **OPERATING INCOME ADJUSTMENT NO. 2 - FLEET FUEL EXPENSE**

			[A]		[B]		[C]
LINE			COMPANY		STAFF		STAFF <sup>1</sup>
NO.	DESCRIPTION		PROPOSED		ADJUSTMENTS		RECOMMENDED
1	Source Supply - Other	\$	15,055,433	\$	-	\$	15,055,433
2	Fleet Fuel Expenses		733		(154)		580
3	Total Source Supply - Other	\$	15,056,166	\$	(154)	\$	15,056,012
4							
5	Pumping Expense - Other	\$	546,038	\$	-	\$	546,03
6	Fleet Fuel Expenses		7,434		(1,559)		5,87
7	Total Pumping Expense - Other	\$	553,472	\$	(1,559)	\$	551,91
8	!						
9	Water Treatment Expenses	\$	594,993	\$	-	\$	594,99
10	Fleet Fuel Expenses		2,308		(484)		1,82
11	Total Water Treatment Expenses	\$	597,301	\$	(484)	\$	596,81
12	·						
13	Transmission and Distribution Expenses	\$	1,709,651	\$	-	\$	1,709,65
14	Fleet Fuel Expenses	*	32,718	•	(5,090)	•	27,62
15	Total Transmission and Distribution Expenses	\$	1,742,369	\$	(5,090)	\$	1,737,27
16	, , , , , , , , , , , , , , , , , , , ,	<u> </u>		<u>-</u> -	· · · · · · · · · · · · · · · · · · ·	<del></del>	
17	Customer Accounting Expenses	\$	1,173,376	\$.	_	\$	1,173,37
18	Fleet Fuel Expenses	Ψ.	8,819	*	(1,372)	•	7,44
19	Total Customer Accounting Expenses	\$	1,182,195	\$	(1,372)	\$	1,180,82
20	Total Sastomer Floodariang Expenses	<u> </u>	7,102,100		(1,10,2)	<u> </u>	1,100,02
21	Administrative and General Expenses	\$	2,087,984	\$	_	\$	2,087,98
22	Fleet Fuel Expenses	Ψ	2,373	Ψ.	(498)	Ψ	1,87
23	Total Administrative and General Expenses	\$	2,090,357	\$	(498)	\$	2,089,860
24	Total Naminoliality and Concrat Expenses	<u> </u>	2,000,007	<del></del>	\	<u> </u>	2,000,00
2 <del>4</del> 25	Total Expense Adjustments	\$	21,221,860	\$	(9,157)	•	21,212,70
	Total Expense Adjustments	<del>-</del>	21,221,000	Ψ	(3,137)	Ψ	21,212,70
26							
27 28	Ct-ffic Calculation based on the most recent 12		th and price of £ 2.20				
	Staff's Calculation based on the most recent 12	поп	in gas price of \$ 3.36				
29 30			Company Pro-forma		Staff's Recalculation		Reduction
31	Source Supply - Other	\$	733		580	¢	154
32	Pumping Expenses Other	Φ	7,434	φ	5,875	Ф	1.55
33	Water Treatment Expenses		2,308		1,824		484
33 34	Transmission and Distribution Expenses		24,273		19,183		5,09
	Customer Accounting Expenses		6,542		5,170		1,37
35	Administrative and General Expenses		2,373		5,170 1,875		49
36		\$	43,664	\$	34,507	•	9,157
37	Totals	<b>4</b>	43,004	<b>P</b>	34,507	Φ	9,15

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References: Column (A), Company Schedule C-1 Column (B): Testimony JMM

Column (C): Column (A) + Column (B)

### OPERATING INCOME ADJUSTMENT NO. 3 - REMOVAL OF PROJECTED EXPENSES

			[A]	[B]			[C]
LINE NO.	DESCRIPTION		COMPANY PROPOSED	,	STAFF ADJUSTMENTS	RE	STAFF <sup>1</sup> COMMENDED
1	Pumping Expenses - Other	\$	544,373	\$	-	\$	544,373
2	Normalization of Pumping Expenses		9,099		(9,099)	\$	-
3	Total Pumping Expense - Other	\$	553,472	\$	(9,099)	\$	544,373
4							
5	Transmission and Distribution Expenses	\$	1,371,693	\$	-	\$	1,371,693
6	Normalization of Transmission and Distribution Expenses		370,676		(370,676)		_
7	Total Transmission and Distribution Expenses	\$	1,742,369	\$	(370,676)	\$	1,371,693

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

### References:

Column (A), Company Schedule C-1

Column (B): Testimony JMM

Column (C): Column (A) + Column (B)

Surrebuttal Schedule JMM-13

### OPERATING INCOME ADJUSTMENT NO. 4 - RUCO MISCELLANEOUS EXPENSE ADJUSTMENT

			[A]	 [B]	[C]
LINE			COMPANY	STAFF	STAFF <sup>1</sup>
NO.	DESCRIPTION	<u>.</u>	PROPOSED	ADJUSTMENTS	 RECOMMENDED
1	Administrative and General Expenses	\$	2,090,357	\$ (7,522)	\$ 2,082,835

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References: Column (A), Company Schedule C-1 Column (B): Testimony JMM Column (C): Column (A) + Column (B)

### OPERATING INCOME ADJUSTMENT NO. 5 - REMOVAL OF ADDITIONAL BMP COSTS

		 [A]		[B]		[C]
LINE		COMPANY	S	TAFF		STAFF <sup>1</sup>
NO.	DESCRIPTION	PROPOSED		STMENTS	F	RECOMMENDED
1	Administrative and General Expenses	\$ 2,083,507	\$	-	\$	2,083,507
2	Removal of Additional BMP Costs	6,850		(6,850)		-
3	Total Administrative and General	\$ 2,090,357	\$	(6,850)	\$	2,083,507

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

### References:

Column (A), Company Schedule C-1

Column (B): Testimony JMM

Column (C): Column (A) + Column (B)

Arizona Water Company - Supersition (Apache Junction, Superior, Miami) Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

OPERATING INCOME ADJUSTMENT NO. 6 - RATE CASE EXPENSE

ij	STAFF1	KECOMMENDED	1,5		\$ 2003 220
[8]	STAFF	SINGMIS		(67,128)	(67.128)
[A]	PROPOSED	\$ 1.985.470	104 887	\$ 2090347	100,000,10
LINE	NO. DESCRIPTION	Administrative and General Expenses	Zate Case Expense Pro Forma	otal Administrative and General	

Staff's Calculation of Rate Case Expense for Pinal Valley

	- ( <del>S</del>	37,759	104,887
<u> </u>	Increase /		10
(o)	T.Y. 2010 Prior Rate Case Expense Charged to O&M - 928.2	20,603	€
[0]	Annual Amortization / Pro Forma <u>Rate Case Exp.</u>	\$ 58,362 \$	
[8]	Normalization Period <u>In Years</u>	п п п п п п п п п п	
₹	T.Y. 2010 Rate Case Expense Estimate / Spread	206,277.86 14,177.38 4,937.47 175,085.54 47,130.98 10,860.25 11,189.57 651.28 1,152.32 66,897.02 77,779.34 616,199	
	Average Number of <u>Customers</u>	28,030 1,927 679 23,792 6,404 1,476 1,521 89 157 9,090 10,569 83,733	
		Pinal Valley White Tank Ajo Superstition Cochise San Manuel Oracle SaddleBrooke Ranch Winkelman Navajo Verde Valley	
	Eas	Pinal Va White Ta White Ta White Ta Ajo Superstit Cochise San Man Oracle SaddleBr Winkelmi Navajo Verde Va Company Proposed Rate Case Expense Pro Forma	Staff Adjustment to Rate Case Expense
	Line System 1 System 2 All Systems	0 - 4 - 5 - 5 - 5	
		0 4 5 9 7 8 6 6 7 7 7 7 7 9 7 9 7 9 9 7	20

<sup>1</sup> Amounts do not reflect other adjustments.

(67, 128)

References: Column (A), Company Schedule C-1 Column (B): Testimony JMM Column (C): Column (A) + Column (B)

### OPERATING INCOME ADJUSTMENT NO. 7 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

			[.	A)	[8]		[C]	[D]		[E]
			PLA	NT In	NonDepreciable	DEF	RECIABLE			DEPRECIATION
LINE	ACCT		SER	VICE	or Fully Depreciated	i	PLANT	DEPRECIATION		EXPENSE
NO.	NO.	DESCRIPTION		Staff	PLANT	(Co	I A - Col B)	RATE	1	(Col C x Col D)
1	301	Organization Cost	\$	187				0.00%	\$	
2	302	Franchise Cost	\$	6.869	\$ 6,869	\$	-	4.00%	\$	
3	303	Other Intangibles	\$	7,940	\$ -	\$	7,940	5,00%	\$	397
4	310.1		\$	793,568	\$ -	\$	793,568	0.00%	\$	
5			\$	153,814	\$ -	\$	153,814	0.00%		•
6		Wells - Other		526,600	\$ -	\$	1,526,600	4.17%		63,608
7	314	Wells	\$ 6	635,805	\$ -	\$	6,635,805	3,13%	\$	207,701
8	320	Pumping Plant Land	Š	18,910	\$ -	\$	18,910	0.00%	\$	` •
9	321	Pumping Plant Structures & Improvements	Š	293,259	\$ -	\$	293,259	2.86%	\$	8,387
10	325	Electric Pumping Equipment	-	.848,582	\$ -	\$	9,848,582	5,88%		579,097
11	328	Gas Engine Equipment	\$	163	\$ -	\$	163	4.00%		7
12	330	Water Treatment Plant - Land	Š	811	\$ -	Š	811	0.00%		
13	331	Water Treatment Structures and Improvements	\$	49,586	\$ -	\$	49,586	2.50%	\$	1,240
14	332	Water Treatment Equipment	•	187,393	\$ .	Š	10,187,393	2.86%		291,359
15	340	Transmission and Distribution - Land	Š	195,215	\$ -	\$	195,215	0.00%		
16	342	Storage Tanks	•	947,247	\$ .	Š	4,947,247	2.00%		98,945
17	343	Transmission and Distribution Mains		,612,436	\$	\$	53,612,436	1.79%		959,663
18	344	Fire Sprinkler Taps	\$	756,878	\$ -	Š	756,878	2.00%		15,138
19	345	Services		475,428	\$ -	Š	13,475,428	2.38%		320,715
20	346	Meters		027,498	\$ -	Š	2,027,498	4,55%		92,251
21	348	Hydrants		697,873	\$ -	\$	3,697,873	1,82%		67,301
22	389	General Plant Land	Š	54,061	\$ -	Š	54,061	0.00%		
23	390	General Plant Structures	Š	910,993	\$ -	\$	910,993	2,50%		22,775
24				.291,792	\$ -	Š	1,291,792	2.23%		28,818
25	391	Office Furniture & Equipment		856,199	\$ -	Š	1,856,199	6.67%		123,808
26	393	Warehouse Equipment	\$	16,284	\$ -	\$	16,284	5.00%		814
27	394	Tools, Shops, and Garage Equipment	Š	523,896	\$ -	Š	523.896	4.00%	\$	20,956
28	395	Laboratory Equipment	Š	87.830	\$ -	\$	87,830	5.00%		4,391
29	396	Power Operated Equipment	\$	44,523	\$ -	\$	44,523	6.67%		2,970
30	397	Communications Equipment	•	102,638	\$ -	Š	1,102,638	6.67%		73,546
31	398	Miscellaneous Equipment	s	98,397		\$	98,397	3.33%		3,277
32		Intentionally Left Blank	•	••,•	*	•			•	-,
33		Total Plant	\$ 114	.222,674	\$ 7,056	\$	114,215,619		\$	2,987,163
34			•	,,	*	•	,,		•	_,
35		Composite Depreciation Rate (Depr Exp / Depreciable Plant):		2.00%						
36		CIAC:	\$ 20	165,452						
37		Amortization of CIAC (Line 35 x Line 36):		403,309						
38		, mortale 10 / 0 / 10 (2 / 10 / 10 / 10 / 10 / 10 / 10 / 10 / 1	•	,						
39		Depreciation Expense Before Amortization of CIAC:	\$ 2	.987,163						
40		Less Amortization of Deferred Liability		28,000						
41		Less Amortization of CIAC:		403,309						
42		Test Year Depreciation Expense - Staff:		,555,854						
43		Depreciation Expense - Company:		672,715						
44		Add deferred CAP increase in amortization		47,654						
45		Staff's Total Adjustment:		(69,207)						
		out o tour rajudations	<del></del>	1-7						

References:
Column [A]: Schedule JMM-4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

### OPERATING INCOME ADJUSTMENT NO. 8 - TEST YEAR INCOME TAXES

LINE NO.	·	}	MPANY OPOSED	STAFF ADJUSTMENTS	STAFF RECOMMENDED
1	Federal Income Taxes	\$	448,513	\$ 170,678	\$ 619,190
2	State Income Taxes		98,803	37,599	136,402
3	Federal and State Income Taxes	\$	547,316	\$ 208,276	\$ 755,592

### References:

Column (A), Company Schedule C-1 Column (B): Column [C] - Column [A] Column (C): Schedule JMM-2

### OPERATING INCOME ADJUSTMENT NO. 9 - PROPERTY TAX EXPENSE

			[A]		[B]
LINE			STAFF		STAFF
NO.	Property Tax Calculation	AS	ADJUSTED	RE	COMMENDED
1	Staff Adjusted Test Year Revenues	\$	15,056,166	\$	15,056,166
2	Weight Factor		2		2
3	Subtotal (Line 1 * Line 2)		30,112,332	\$	30,112,332
4	Staff Recommended Revenue, Per Schedule JMM-1		15,056,166	\$	17,053,383
5	Subtotal (Line 4 + Line 5)		45,168,499		47,165,716
6	Number of Years		3		3
7	Three Year Average (Line 5 / Line 6)		15,056,166	\$	15,721,905
8	Department of Revenue Mutilplier		2		2
9	Revenue Base Value (Line 7 * Line 8)		30,112,332	\$	31,443,810
10	Plus: 10% of CWIP -		-		-
11	Less: Net Book Value of Licensed Vehicles		-	\$	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)		30,112,332	\$	31,443,810
13	Assessment Ratio		20.5%		20.5%
14	Assessment Value (Line 12 * Line 13)		6,173,028	\$	6,445,981
15	Composite Property Tax Rate (Per Company Schedule)		13.4045%		13.4045%
16					
17	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$	827,466		
18	Company Proposed Property Tax		747,264		
19					•
20	Staff Test Year Adjustment (Line 17-Line 18)	\$_	80,202		
21	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)			\$	864,054
22	Staff Test Year Adjusted Property Tax Expense (Line 17)			\$	827,466
23	Increase in Property Tax Expense Due to Increase in Revenue Requirement			\$	36,588
24					
25	Increase to Property Tax Expense			\$	36,588
26	Increase in Revenue Requirement			•	1,997,217
27	Increase to Property Tax per Dollar Increase in Revenue (Line25/Line 26)				1.831953%
	, , , , , , , , , , , , , , , , , , , ,				

### **Arizona Water Company Cost of Capital Calculation**

Capital Structure
And Weighted Average Cost of Capital
Staff Recommended and Company Proposed

[A] [B] [C]	[D]
-------------	-----

			Weighted
Description	Weight (%)	Cost	Cost
Staff Recommended Str	ucture		
Debt	49.0%	6.8%	3.3%
Common Equity	51.0%	9.4%	<u>4.8%</u>
Weighted Average Cost	of Capital		8.1%
Company Proposed Stru	cture <sup>1</sup>		
Debt	49.0%	6.8%	3.3%
Common Equity	51.0%	12.5%	<u>6.4%</u>
Weighted Average Cost	of Capital		9.7%

<sup>&</sup>lt;sup>1</sup> Company Schedule D-1, page 2

[D]: [B] x [C]

Arizona Water Company - Cochise (Bisbee, Sierra Vista) Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

SURREBUTTAL TESTIMONY OF Jeffrey M. Michlik

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# Arizona Water Company - Cochise (Bisbee, Sierra Vista) Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

### REVENUE REQUIREMENT

LINE <u>NO.</u>		(A) COMPANY FAIR <u>VALUE</u>	(B) STAFF FAIR <u>VALUE</u>
1	Adjusted Rate Base	\$ 8,550,839	\$ 8,373,538
2	Adjusted Operating Income (Loss)	\$ 387,079	\$ 473,289
3	Current Rate of Return (L2 / L1)	4.53%	5.65%
4	Required Rate of Return	9.72%	8.1%
5	Required Operating Income (L4 * L1)	\$ 830,936	\$ 678,257
6	Operating Income Deficiency (L5 - L2)	\$ 443,857	\$ 204,968
7	Gross Revenue Conversion Factor	1.6516	1.6516
8	Required Revenue Increase (L7 * L6)	\$ 733,087	\$ 338,521
9	Adjusted Test Year Revenue	\$ 3,303,549	\$ 3,303,549
10	Proposed Annual Revenue (L8 + L9)	\$ 4,036,636	\$ 3,642,070
11	Required Increase in Revenue (%)	22.19%	10.25%

References: Column (A): Company Schedule A-1

Column (B): Staff Schedules JMM-3 and JMM-7

### **GROSS REVENUE CONVERSION FACTOR**

LINE		(A)	(B)	(C)	(D)
NO.	DESCRIPTION	(~)	(5)	(0)	(5)
	Calculation of Gross Revenue Conversion Factor:				
1	Revenue	100.0000%			
	Uncollecible Factor (Line 11)	0.0000%			
	Revenues (L1 - L2) Combined Federal and State Income Tax and Property Tax Rate (Line 23)	100.0000% 39.4520%			
	Subtotal (L3 - L4)	60.5480%			
	Revenue Conversion Factor (L1 / L5)	1.651581			
	Calculation of Uncollecttible Factor:				
7	Unity	100.0000%			
	Combined Federal and State Tax Rate (Line 23)	38.5989%			
9 10	One Minus Combined Income Tax Rate (L7 - L8 ) Uncollectible Rate	<u>61.4011%</u> 0.0000%			
	Uncollectible Factor (L9 * L10 )	0.0000%			
	Calculation of Effective Tax Rate:				
12	Operating Income Before Taxes (Arizona Taxable Income)	100.0000%			
	Arizona State Income Tax Rate	6.9680%			
	Federal Taxable Income (L12 - L13)	93.0320% 34.0000%			
	Applicable Federal Income Tax Rate (Line 55) Effective Federal Income Tax Rate (L14 x L15)	31.6309%			
	Combined Federal and State Income Tax Rate (L13 +L16)		38.5989%		
	Calculation of Effective Property Tax Factor				
	Unity	100.0000%			
	Combined Federal and State Income Tax Rate (L17) One Minus Combined Income Tax Rate (L18-L19)	38.5989% 61.4011%			
	Property Tax Factor (JMM-17, L27)	1.3893%			
	Effective Property Tax Factor (L20*L21)		0.8531%		
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)		:	39.4520%	
24	Required Operating Income (Schedule JMM-1, Line 5)	\$ 678,257			
	AdjustedTest Year Operating Income (Loss)	473,289	004.000		
26	Required Increase in Operating Income (L24 - L25)	\$	204,968		
	Income Taxes on Recommended Revenue (Col. [E], L52)	\$ 252,667			
	Income Taxes on Test Year Revenue (Col. [B], L52)	123,817	128,850		
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		120,030		
	Recommended Revenue Requirement (Schedule JMM-1, Line 10)	\$ 3,642,070			
31	Uncollectible Rate (Line 10) Uncollectible Expense on Recommended Revenue (L30*L31)	<u>0.0000%</u> \$ -			
	Adjusted Test Year Uncollectible Expense	\$			
34	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)		-		
35	Property Tax with Recommended Revenue (JMM-17, Col B, L31)	\$ 142,396			
	Property Tax on Test Year Revenue (JMM-17, Col A, L17)	137,693			
	Increase in Property Tax Due to Increase in Revenue (L35-L36)  Total Required Increase in Revenue (L26 + L29 + L34 + L37)		4,703 338,521		
00	Total Hodging Indicate In Horonae (EEC + EC+ + EC+ + EC+)				
		Test		Staff	
	Calculation of Income Tax:	Year		Recommended	
	Revenue (Schedule JMM-7, Col. [C], Line 5 & Sch. JMM-1, Col. [D] Line 10)	\$ 3,303,549 \$	338,521		
	Operating Expenses Excluding Income Taxes Synchronized Interest (L56)	\$ 2,706,443 \$ 276,327		\$ 2,711,146 \$ 276,327	
	Arizona Taxable Income (L39 - L40 ~ L41)	\$ 320,779	,	\$ 654,597	
	Arizona State Income Tax Rate	6.9680%		6.9680%	
	Arizona Income Tax (L42 x L43) Federal Taxable Income (L42 - L44)	\$ <u>22,352</u> \$ 298,428		\$ 45,612 \$ 608,985	
	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 34%	\$ 17,000		\$ 17,000	
47	Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 34%	\$ 8,500		\$ 8,500	
	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 34%	\$ 8,500 \$ 67,465		\$ 8,500 \$ 79,900	
	Federal Tax on Fifth Income Bracket (\$335,001 - \$335,000) @ 34%	\$ 67,465		\$ 79,900 \$ 93,155	
51	Total Federal Income Tax	\$ 101,465		\$ 207,055	
52	Combined Federal and State Income Tax (L44 + L51)	\$ 123,817		\$ 252,667	
53	Applicable Federal Income Tax Rate [Col. [E], L51 - Col. [B], L51] / [Col. [E], L45	o - Col. [B], L45]		34.0000%	
	Calculation of Interest Synchronization:	0.070.505			
	Rate Base (Schedule JMM-3, Col. (C), Line 17 Weighted Average Cost of Debt	\$ 8,373,538 3.3000%			
	Synchronized Interest (L45 X L46)	\$ 276,327			

# **RATE BASE - ORIGINAL COST**

LINE NO.		(A) COMPANY AS <u>FILED</u>	<u>ADJ</u>	(B) STAFF <u>USTMENTS</u>	Adj. <u>No.</u>	<u>/</u>	(C) STAFF AS ADJUSTED
1 2 3 4	Plant in Service Less: Accumulated Depreciation Net Plant in Service	\$  20,992,936 7,506,943 13,485,993	\$	(122,234) - (122,234)		\$	20,870,702 7,506,943 13,363,759
5 6	<u>LESS:</u>						
7 8 9	Contributions in Aid of Construction (CIAC) Less: Accumulated Amortization Net CIAC	\$ 2,198,794 439,381 1,759,413	\$	-		\$ \$ \$	2,198,794 439,381 1,759,413
10 11 12	Advances in Aid of Construction (AIAC)	1,632,190		-			1,632,190
13 14	Customer Deposits	38,290		. <u>-</u>			38,290
15 16 17	Deferred Income Tax Credits	1,823,964		-			1,823,964
18 19 20	ADD:						
21 22	Working Capital	318,702		(55,066)	3		263,636
23 24 25	Deferred Regulatory Assets	- ,		-			-
26	Original Cost Rate Base	\$ 8,550,839	\$	(177,301)		\$	8,373,538

References: Column [A]: Company as Filed Column [B]: Schedule JMM-4

Column (C): Column (A) + Column (B)

Arizona Water Company - Cochise (Bisbee, Sierra Vista) Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

E   E   C   D   D   C   C   D   C   C   C   C	8,373,538
EB   C    ED     ED   ED   E	60
Ell   C	\$ (55,066)
Fig.   Factor Adjustment   Ref. Sch JMM-5   \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	
B    ADJ #1.	S
555 553 553 553 553 553 553 553 335 533 53 5	\$ (122,234)
COMPANY AS FILED  \$ 477  RS FILED  \$ 18,755  25,252  445,953  11,190,671  8,935  14,126  16,144  750,636  10,590,817  3,122,137  3,122,137  3,122,137  3,122,137  3,122,137  3,122,137  3,122,137  3,122,137  3,122,137  3,122,137  3,122,137  3,122,137  3,122,137  3,122,137  3,122,137  3,122,137  3,122,137  3,122,137  3,122,137  4,39,381  1,759,413  1,632,190  3,8,290  1,823,964  1,823,964  1,823,964	\$ 8,550,839
NE ACCT.	Dereieu negulatury Assets Original Cost Rate Base
INE ACCT.    1	55 Ori

### RATE BASE ADJUSTMENT NO. 1 - RUCO RATE BASE ADJUSTMENT

				[A]		[8]		[C]
LINE NO.	ACCT NO.	DESCRIPTION		COMPANY PROPOSED		STAFF ADJUSTMENTS		STAFF RECOMMENDED
1	343	Transmission and Distribution Mains		10,590,817	ڀل	(23,852)	•	
2	345	Services	Ψ	3,122,215	Φ	(83,267)	₽	10,566,965 3,038,948
3	348	Hydrants		731,417		(15,558)		715,859
4			\$	14,444,449	\$	(122,677)	\$	14,321,772
5								
6	Phoenix	Meter Shop						
7	394	Tools, Shops, and Garage Equipment	\$	112,833	\$	(1,838)	\$	110,995
8	397	Communications Equipment		550,316		2,281		552,597
9			\$	663,149	\$	443	\$	663,592

### REFERENCES:

Column [A]: Company Filing
Column [B]: Testimony JMM
Column [C]: Column [A] + Column [B]

Surrebuttal Schedule JMM-6

Arizona Water Company - Cochise (Bisbee, Sierra Vista) Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

RATE BASE ADJUSTMENT NO. 2 - NOT USED

### RATE BASE ADJUSTMENT NO. 3 - CASH WORKING CAPITAL

				[A]	[B]	[C]	[D]	[E]		[F]
LINE	ACCT			OMPANY	STAFF	STAFF	7	• •		
NO.	NO.	DESCRIPTION		ROPOSED	ADJUSTMENTS	RECOMMENDED	l			
1	,	Working Capital	\$	318,702	\$ (55,066)	\$ 263,636	-			
2							•			
3										
4										
5				Test Year			Net	Lead / Lag	Wo	rking Cash
6				Adjusted	Revenue	Expense	Lag Days	Factor	Re	quirement
7				Results			[B - C]	[D + 365]		[A X E]
8	Staff's Ca	lculation								
9	Purchase	d Power	\$	451,385	30.32	30.87	(0.55)	(0.0015)	\$	(678)
10	Payroll			843,054	30.32	14.00	16.32	0.0447		37,700
11	Purchase			-	30.32	-	30.32	0.0831		-
12	Chemicals			27,617	30.32	(18.11)	48.43	0.1327		3,665
13		Liability Insurance		39,836	30.32	(45.27)	75.59	0.2071		8,250
14		s Compensation Insurance		9,111	30.32	(46.50)	76.82	0.2105		1,918
15	Health Ins			145,704	30.32	(8.92)	39.24	0.1075		15,665
16		M (Excluding Rate Case Expense)		367,506	30.32	(9.27)	39.59	0.1085		39,864
17		come Taxes		207,055	30.32	37.00	(6.68)	(0.0183)		(3,788)
18		me Taxes		45,612	30.32	37.00	(6.68)	(0.0183)		(835)
19	FICA Taxe			63,246	30.32	14.00	16.32	0.0447		2,828
20		UTA Taxes		1,882	30.32	83.10	(52.78)	(0.1446)		(272)
21	Property T			142,396	30.32	212.00	(181.68)	(0.4977)		(70,877)
22		on, Svc. Contracts, & Misc. Fees		40,447	30.32	(98.83)	129.15	0.3538		14,312
23	Retiremen	t Annuities (401k)		74,691	30.32	34.72	(4.40)	(0.0120)		(900)
24										
25				0.450.540						
26		like-r	\$	2,459,543					\$	46,851
27	8	ubtotal								
28 29	Interest Ex	mana.		286,114	30.32	91.25	(60.00)	(0.4000)		(47 700)
30	Cost of Eq			200,114	30.32	91.25	(60.93)	(0.1669)		(47,760)
30	Cost of Eq	uny		-	•	-	-	•		-
32		ubtotal	\$	286,114						(47.700)
33	3	idDlo(a)	Ф	200,114					\$	(47,760)
33 34										
35	т	otal		2,745,657					\$	(909)
36	•	Ottal		2,140,007				· · · · · · · · · · · · · · · · · · ·	<u> </u>	(909)
36 37	Compone	Cash Working Capital							•	54.45T
37	Company (	Cash Working Capital							\$	54,157
38 39	Increase/(I	Jacroscal							•	/EE 000'
39	micrease/(I	200 0a36)						=	\$	(55,066)

REFERENCES:
Column [A]: Company Filing
Column [B]: Direct Testimony JMM
Column [C]: Column [A] + Column [B]

### OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND STAFF RECOMMENDED

		[A] COMPANY	[B]	[C] STAFF	[D]	[E]
		ADJUSTED	STAFF	TEST YEAR	STAFF	
LINE		TEST YEAR	TEST YEAR	AS	PROPOSED	STAFF
<u>NO.</u>	DESCRIPTION	<u>AS FILED</u>	<u>ADJUSTMENTS</u>	ADJUSTED	CHANGES	RECOMMENDED
1	OPERATING REVENUES:					
2	Residential	\$ 2,270,520	\$ -	\$ 2,270,520	\$ 338,521	\$ 2,609,041
3	Commercial	863,072	-	863,072	•	863,072
4	Industrial	3,342	-	3,342	-	3,342
5	Private Fire Service	16,647		16,647		16,647
6	Other Water Revenues	107,091		107,091		107,091
7	Total Water Revenues	\$ 3,260,672	\$ -	\$ 3,260,672	\$ 338,521	\$ 3,599,193
8						
9	Miscellaneous	42,877.00		42,877.00		42,877
10	Total Operating Revenues	\$ 3,303,549	\$ -	\$ 3,303,549	\$ 338,521	\$ 3,642,070
11						
12	OPERATING EXPENSES:					
13	Source of Supply Expenses					
14	Purchased Water	\$ -	\$ -	\$ -	\$ -	\$ -
15	Other	36,839	(471)	36,368	-	36,368
16	Pumping Expenses					
17	Purchased Power	448,281	3,104	451,385	-	451,385
18	Purchased Gas	1,606	(5 (50)	1,606	-	1,606
19	Other	103,494	(5,152)	98,342	-	98,342
20	Water Treatment Expenses	75,164	(634)	74,530	-	74,530
21	Transmission and Distribution Expenses	564,445	(115,648)	448,797	-	448,797
22	Customer Accounting Expenses	355,671	(3,328)	352,343	-	352,343
23	Sales Expense	570.007	(04.505)	-	•	-
24	Administrative and General Expenses	573,227	(21,535)	551,692 2.015,062	<del></del>	551,692
25 26	Total Operation and Maintenance Expense	2,158,727	(143,665)	2,015,062	-	2,015,062
27	Depreciation and Amortization Expenses	498,716	(2,613)	496,103		496,103
28	Depreciation and Amortization expenses	450,710	(2,013)	450,103		490,103
29	Taxes					
30	Federai Income Taxes	52,012	49,453	101,465	105,589	207.055
31	State Income Taxes	11,458	10,894	22,352	23,260	45,612
32	Property Taxes	137,972	(279)	137,693	4,703	142,396
33	Other	57,585	(2,0)	57,585	4,700	57,585
34	Total Taxes	259,027	60,068	319,095	133,553	452,648
35	Total Tunes	200,021	-	-	,00,000	402,040
36		_	-	_	-	_
37	Total Operating Expenses	2,916,470		2,830,260	133,553	2,963,813
38						2,000,010
39	Operating Income (Loss)	\$ 387,079	\$ 86,210	\$ 473,289	\$ 204,968	\$ 678,257

References:
Column (A): Company Schedule C-1
Column (B): Schedule JMM-9
Column (C): Column (A) + Column (B)
Column (D): Schedules JMM-17 and JMM-18
Column (E): Column (C) + Column (D)

Arizona Water Company - Cochise (Bisbee, Sierra Vista)
Docket No. W-01445A-11-0310
Test Year ended December 31, 2010
SUMMARY OF OPERATING INCOME STATEMENT ADJUS'

YEAR
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	₹	(B)	<u>D</u>	<u>o</u>	旦	Ð	9	Ξ	E	5		۶
F004 F1			. !	Removal of Pumping	•		•	•	3	Ē		Ξ
NO NO	VINDAMO	Reverse Unbilled	Fleet Fuel	Transmission and Distribution	RUCO Miscellaneous		Rate Case		Іпсоте Тах	Property		STAFF
DESCRIPTION	AS FILED	ADJ #1	ADJ #2	Projection ADJ #3	Expense Adjustment ADJ #4	Not Used	Expense	Not Used	Expense	Expense		: : : :
1 OPERATING REVENUES:		Ref: Sch JMM-10	Ref: Sch JMM-11	Ref: Sch JMM-12	Ref: Sch JMM-13	Ref: Sch JMM-14	Ref. Sch. IMM-15	Pof Sch IMM 16	AUJ #8	ADJ #9		ADJUSTED
Z Residential	\$ 2,270,520 \$	•	•	•	\$	8	5	Call Coll Simple 10	Per Sci Jivini-	Net. Sch JIMIN	اج	į
3 Commercial	863,072			•	•	•		•	•		^	2,270,520
- Industrial	3,342	•	•	•	•	•		•	•	•		863,072
5 Private Fire Service	16,647	•	•	•	•	•		•				3,342
5 Other Water Revenues	ı	,		1	:	•	į					16,647
/ Total Water Revenues	\$ 3,260,672 \$	,							5	9		107,091
9 Miscellaneous	\$ 42.877										•	21010000
10 Total Operating Revenues	\$ 3,303,549 \$	,			69						\$	42,877
										8	4	3,303,549
2 STILL OF EXPENSES.	-											
Source	•							•			•	
	,	•	•	•	•	1	•	•	•	•	*	•
	36,839	(428)	(42)	•	•	•		•	•			. ;
Pumping Expenses									•	•		36,368
	448,281	3,104	•	,	•	•		•		•		į
Purchased Gas	1,606	•	•	•	•	1	•	•	•			451,385
Other	103,494	(1,635)	(429)	(3,089)	•	•	•	• •	•	•		1,606
to water treatment Expenses	75,164	(501)	(133)		•	•	•			•		20,342
11 Transmission and Distribution Expenses	564,445	(5,256)	(1,401)	(108,992)	,	,	•		•	•		74,530
	355,671	(2,950)	(378)	•	•	•	•		•	•		448,797
	•		•	•	•	ı		•	•	•		352,343
	573,227	(1,739)	(137)				(17.866)		•	•		
43 Total Operation and Maintenance Expense 26	\$ 2,158,727 \$	(9,406)	(2,520) \$	\$ (112,080) \$	(1,794)		\$ (17,866)	8	s		-	201692
27 Depreciation and Amortization Expenses	498,716	,	•	•			•		•	,	•	2,013,002
	-			ı	·	•	•	(2,613)	•	•		496,103
29 Taxes								•	•	•		
	52,012	•	•	•	•				•	•		
	11,458	1	•	•		•	•		49,453			101,465
32 Property Taxes	137,972	•		•			•	•	10,89			22,352
33 Other		•	•	1	•		•		•	5)	(279)	137,693
34 Total Taxes	\$ 259,027 \$	•		·	•	44			\$ 20.347		6	57,585
35 Total Oceaning Expenses	- 1						•	·	\$c.00	•	* (6/7)	319,095
37 Colai Operating Expenses	\$ 2,916,470 \$	(9,406)	(2,520)	\$ (112,080)	(1,794)	. \$	\$ (17,866) \$	\$ (2,613)	\$ 60,347	S	(279) \$	2 830 260
38 Operating Income (Loss)	\$ 387.079 \$	9 406 \$	2 520	113 080		•			s			
			4,040	12,000	* 1,94	•	\$ 17,866	\$ 2,613	\$ (60,347) \$		279 \$	473,289

### OPERATING INCOME ADJUSTMENT NO. 1 - REVERSE UNBILLED EXPENSES

			[A]		[B]		[C]
LINE			COMPANY		STAFF		STAFF <sup>1</sup>
NO.	DESCRIPTION		PROPOSED		ADJUSTMENTS	RE	COMMENDED
1	Residential	\$	2,270,520	\$	-	\$	2,270,520
2	Commercial		863,072		-		863,072
3	Industrial		3,342		-		3,342
4	Revenue Adjustments	\$	3,136,934	\$	-	\$	3,136,934
5							
6	Source Supply - Other	\$	36,410	\$		\$	36,410
7	Unbilled Expenses		429		(429)		-
8	Total Source Supply - Other	\$	36,839	\$	(429)	\$	36,410
9							
10	Purchased Power	\$	451,385	\$		\$	451,385
11	Unbilled Expenses	•	(3,104)		3,104	•	-
12	Total Purchased Power	\$	448,281	\$	3,104	\$	451,385
13				-			
14	Pumping Expense - Other	\$	101,859	\$		\$	101.859
15	Unbilled Expenses	•	1,635	•	(1,635)	•	-
16	Total Pumping Expense - Other	\$	103,494	\$	(1,635)	\$	101,859
17				Ė		<u> </u>	
18	Water Treatment Expenses	\$	74,663	\$		\$	74,663
19	Unbilled Expenses	•	501	*	(501)	•	. 1,000
20	Total Water Treatment Expenses	\$	75,164	\$	(501)	\$	74,663
21				Ť	(1.1.7)	Ť	
22	Transmission and Distribution Expenses	\$	559,189	\$	_	\$	559,189
	Unbilled Expenses	•	5,256	۳	(5,256)	•	555,165
24	Total Transmission and Distribution Expenses	\$	564,445	\$	(5,256)	\$	559,189
25			551,115	Ť	(0,200)	<u> </u>	550,105
26	Customer Accounting Expenses	\$	352,721	\$	_	\$	352,721
27	Unbilled Expenses	•	2,950	Ψ	(2,950)	•	002,721
28	Total Customer Accounting Expenses	\$	355,671	\$	(2,950)	\$	352,721
29	The factor is th		000,011	-	(2,000)	<u> </u>	332,121
30	Administrative and General Expenses	\$	571,488	¢	_	\$	571,488
31	Unbilled Expenses	Ψ	1,739	Ψ	(1,739)	Ψ	311, <del>4</del> 00
32	Total Administrative and General Expenses	\$	573,227	\$	(1,739)	\$	571,488
33	Total / Commission of Control Expenses	<del>-</del>	313,221	Ψ	(1,133)	Ψ	371,400
33 34	Total Expense Adjustments	\$	2,157,121	\$	(9,406)	\$	2 147 715
54	Total Expense Adjustments	Ψ	2,107,121	Ψ	(9,400)	Ψ	2,147,715

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References: Column (A), Company Schedule C-1 Column (B): Testimony JMM Column (C): Column (A) + Column (B)

### OPERATING INCOME ADJUSTMENT NO. 2 - FLEET FUEL EXPENSE

			[A]		[B]		[C]
LINE			COMPANY		STAFF	Γ	STAFF <sup>1</sup>
NO.	DESCRIPTION		PROPOSED		ADJUSTMENTS	R	ECOMMENDED
1	Source Supply - Other	\$	3,303,362	\$	_	\$	3,303,362
2	Fleet Fuel Expenses		187		(42)		144
3	Total Source Supply - Other	\$	3,303,549	\$	(42)	\$	3,303,507
4							
5	Pumping Expense - Other	\$	101,602	\$		\$	101,602
6	Fleet Fuel Expenses		1,892		(429)		1,463
7	Total Pumping Expense - Other	\$	103,494	\$	(429)	\$	103,065
8							
9	Water Treatment Expenses	\$	74,577	\$	-	\$	74,577
10	Fleet Fuel Expenses		587	•	(133)	•	454
11	Total Water Treatment Expenses	\$	75,164	\$	(133)	\$	75,031
12					<del> </del>	_	
13	Transmission and Distribution Expenses	\$	531,727	\$	<b>-</b>	\$	531,727
14	Fleet Fuel Expenses	•	32,718	Τ.	(1,401)	•	31,317
15	Total Transmission and Distribution Expenses	\$	564,445	\$	(1,401)	\$	563,044
16	·				<u> </u>		
17	Customer Accounting Expenses	\$	346,852	\$	_	\$	346,852
18	Fleet Fuel Expenses	•	8,819	*	(378)	•	8,441
19	Total Customer Accounting Expenses	\$		\$	(378)	\$	355,293
20					(5.5)	<u> </u>	
21	Administrative and General Expenses	\$	572,623	\$	_	\$	572,623
22	Fleet Fuel Expenses	•	604	*	(137)	Ψ	467
23	Total Administrative and General Expenses	\$	573,227	\$	(137)	\$	573,090
24	•			<del></del>			
25	Total Expense Adjustments	\$	4,975,550	\$	(2,520)	\$	4,973,030
26		<u> </u>		<u> </u>	(2,020)	<del>-</del>	1,010,000
27							
28	Staff's Calculation based on the most recent 12	mont	h gas price of \$ 3.38				
29							
30			Company Pro-forma	Stat	ffs Recalculation		Reduction
31	Source Supply - Other	\$	187	\$	144	\$	42
32	Pumping Expenses Other	•	1,892	•	1,463	*	429
33	Water Treatment Expenses		587		454		133
34	Transmission and Distribution Expenses		6,177		4,776		1,401
35	Customer Accounting Expenses		1,665		1,287		378
36	Administrative and General Expenses		604		467		137
37	Totals	\$	11,112		.07		

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References:
Column (A), Company Schedule C-1
Column (B): Testimony JMM
Column (C): Column (A) + Column (B)

# OPERATING INCOME ADJUSTMENT NO. 3 - REMOVAL OF PROJECTED EXPENSES

			[A]		[B]	[C]
LINE NO.	DESCRIPTION		COMPANY PROPOSED	А	STAFF DJUSTMENTS	STAFF <sup>1</sup> OMMENDED
1	Pumping Expenses - Other	<u> </u>	100,406		-	\$ 100,406
2	Normalization of Pumping Expenses		3,088		(3,088)	 <u> </u>
3	Total Pumping Expense - Other	\$	103,494	\$	(3,088)	\$ 100,406
4				-		
5	Transmission and Distribution Expenses	\$	455,453	\$	-	\$ 455,453
6	Normalization of Transmission and Distribution Expenses		108,992		(108,992)	 _
7	Total Transmission and Distribution Expenses	\$	564,445	\$	(108,992)	\$ 455,453

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

### References:

Column (A), Company Schedule C-1

Column (B): Testimony JMM

Column (C): Column (A) + Column (B)

### OPERATING INCOME ADJUSTMENT NO. 4 - RUCO MISCELLANEOUS EXPENSE ADJUSTMENT

		[A]	[B]	[C]
LINE		COMPANY	STAFF	STAFF <sup>1</sup>
NO.	DESCRIPTION	PROPOSED	ADJUSTMENTS	RECOMMENDED
1	Administrative and General Expenses	\$ 573,227	\$ (1,794)	\$ 571,433

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

### References:

Column (A), Company Schedule C-1

Column (B): Testimony JMM

Column (C): Column (A) + Column (B)

Surrebuttal Schedule JMM-14

Arizona Water Company - Cochise (Bisbee, Sierra Vista) Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

OPERATING INCOME ADJUSTMENT NO. 5 - NOT USED

Arizona Water Company - Cochise (Bisbee, Sierra Vista) Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

OPERATING INCOME ADJUSTMENT NO. 6 - RATE CASE EXPENSE

5	STAFF <sup>1</sup>	MINE	3 544,846	\$ 555,361
[8]	STAFF	S		\$ (17,866)
[A]	COMPANY	\$ 544 846	28.381	\$ 573,227
	DESCRIPTION	Administrative and General Expenses	Rate Case Expense Pro Forma	Total Administrative and General
	NO F	_	7	ო

Staff's Calculation of Rate Case Expense for Pinal Valley

	/ (ē	10,515	28,381
<u>(E)</u>	Increase / (Decrease)	<del>-</del> ·	75
	o e io io	5,195 \$	ь
[0]	T.Y. 2010 Prior Rate Case Expense Charged to O&M - 928.2	ις.	
[0]	Annual Amortization / Pro Forma <u>Rate Case Exp.</u>	15,710	
	Amorti Pro F Rate Ca	€4	
[8]	Normalization Period <u>in Years</u>		
	Norm: Pe		
	010 ase ise ite /	206,277.86 14,177.38 4,997.47 175,085.54 47,130.98 11,880.25 11,189.57 661.28 1,152.32 66,897.02 77,779.34 616,199	
[A]	T.Y. 2010 Rate Case Expense Estimate /	20, 71, 44, 11, 11, 11, 11, 11, 11, 11, 11, 1	
		28,030 1,927 679 679 6,404 1,476 1,476 1,57 89 157 9,090 10,569 83,733	
	ige er of <u>ners</u>	23 1.1.6.9. 1.1.1.0.9. 1.1.1.0.9. 1.1.1.1.0.9. 1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	
	Average Number of <u>Customers</u>		
		(e Ranch	
		Pinal Valley White Tank Ajo Superstition Cochise San Manuel Oracle SaddleBrooke Ranch Winkelman Navajo Verde Valley	оппа
		Pina Whit Ajo Supe Coct Sach Orac Sadk Wink Nave Verd Verd	ise Pro F
		Last Tim	se Experse Expers
		: Incurred	Rate Cas
	<u>s</u>	Expense	inposer tment to
	<u>System</u> All Systems	Rate Case Expense Incurred Last Time	Staff Adjustment to Rate Case Expense  Staff Adjustment to Rate Case Expense
	Line 1 2	8 4 5 9 7 8 6 0 1 T Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z Z	19 20

<sup>1</sup> Amounts do not reflect other adjustments.

References: Column (A), Company Schedule C-1 Column (B): Testimony JMM Column (C): Column (A) + Column (B)

### OPERATING INCOME ADJUSTMENT NO. 7 - NOT USED

			[A]			[B]	[C]	[D]	(E)	
	1		PLANT		,	lonDepreciable	DEPRECIABLE		DEPRECIATIO	)N(
LINE	ACCT		SERVIC	E	٥	r Fully Depreciated	PLANT	DEPRECIATION	EXPENSE	
NO.	NO.	DESCRIPTION	Per Sta		<u> </u>	PLANT	(Col A - Col B)	RATE	(Col C x Col I	2) ]
1	301	Organization Cost	\$	47		47	\$ (0)			-
2	302	Franchise Cost				-	\$ 18,755	4.00%		50
3	303	Other Intangibles		252		-	\$ 25,252	5.00%		33
4	310.1	Water Rights	\$ 445	953	\$	-	\$ 445,953	0.00%		-
5	310.3	Other Source of Supply Land	\$ 12	971	\$	-	\$ 12,971	0.00%		-
6	310.4	Wells - Other	\$	~	\$	-	\$ -	2.50%		-
7	314	Wells	\$ 1,190		\$	-	\$ 1,190,671	3.13%	•	38
8	320	Pumping Plant Land		,935		-	\$ 8,935	0.00%		-
9	321	Pumping Plant Structures & Improvements		922		-	\$ 46,922	2.86%		
10	325	Electric Pumping Equipment	\$ 1,471		\$	-	\$ 1,471,226	5.88%		
11	328	Gas Engine Equipment	\$ 188	,792	\$	-	\$ 188,792	4.00%		52
12	330	Water Treatment Plant - Land	\$	-	\$	•	\$ -	0.00%		-
13	331	Water Treatment Structures and Improvements		,144	\$	-	\$ 16,144	2.50%		04
14	332	Water Treatment Equipment		,026		-	\$ 127,026	2.86%		33
15	340	Transmission and Distribution - Land		,044		•	\$ 5,044	0.00%		-
16	342	Storage Tanks				-	\$ 750,636	2.00%		
17	343	Transmission and Distribution Mains	\$ 10,566			-	\$ 10,566,965	1.79%		
18	344	Fire Sprinkler Taps		,137		•	\$ 322,137	2.00%		
19	345	Services	\$ 3,038			-	\$ 3,038,948	2.38%		
20	346	Meters		,436	\$	-	\$ 477,436	4.55%		
21	348	Hydrants		859		-	\$ 715,859	1.82%		29
22	389	General Plant Land		450		-	\$ 2,450	0.00%		-
23	390	General Plant Structures		,995		-	\$ 48,995	2.50%		
24	390,1	Leasehold Improvements		,181		•	\$ 119,181	1.62%		
25	391	Omoo t animare a equipment				•	\$ 532,328	6.67%		
26	393	Warehouse Equipment	\$	905		-	\$ 905	5.00%		45
27	394	toolo, onope, and our age arquipment		,995		-	\$ 110,995	4.00%		
28	395	Laboratory Equipment		,		-	\$ 5,639	5.00%		B2
29	396			,867		-	\$ 33,867	6.67%		
30	397	Communications Equipment		,597			\$ 552,597	6.67%		
31	398	Miscellaneous Equipment	\$ 34	,025	\$	-	\$ 34,025	3.33%	\$ 1,13	33
32		Intentionally Left Blank								
33		Total Plant	\$ 20,870	,702	\$	47	\$ 20,851,900		\$ . 540,07	79
34										
35		Composite Depreciation Rate (Depr Exp / Depreciable Plant):	2	.00%	,					
36		CIAC:_			_					
37		Amortization of CIAC (Line 35 x Line 36):	\$ 43	,976						
38		Description Francisco Bafasa Association of CIAC.	e 540	.079						
39		Depreciation Expense Before Amortization of CIAC:								
40		Less Amortization of CIAC:		,976 ,103	-					
41		Test Year Depreciation Expense - Staff:	•	716						
42		Depreciation Expense - Company:			-					
43		Staff's Total Adjustment:	<b>₽</b> (2	,613)	<u>L</u>					

References:
Column [A]: Schedule JMM-4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

### OPERATING INCOME ADJUSTMENT NO. 8 - TEST YEAR INCOME TAXES

LINE NO.	DESCRIPTION	_	OMPANY ROPOSED	STAFF ADJUSTMENTS	STAFF RECOMMENDED
1	Federal Income Taxes	\$	52,012	\$ 49,453	\$ 101,465
2	State Income Taxes		11,458	10,894	22,352
3	Federal and State Income Taxes	\$	63,470	\$ 60,347	\$ 123,817

References: Column (A), Company Schedule C-1 Column (B): Column [C] - Column [A] Column (C): Schedule JMM-2

# OPERATING INCOME ADJUSTMENT NO. 9 - PROPERTY TAX EXPENSE

			[A]			[B]
LINE			STAFF			STAFF
NO.	Property Tax Calculation	AS	ADJUSTED	<u> </u>	REC	OMMENDED
1	Staff Adjusted Test Year Revenues	\$	3,303,549	5	\$	3,303,549
2	Weight Factor		2_	_		2
3	Subtotal (Line 1 * Line 2)		6,607,098		\$	6,607,098
4	Staff Recommended Revenue, Per Schedule JMM-1		3,303,549	5	\$	3,642,070
5	Subtotal (Line 4 + Line 5)		9,910,647			10,249,168
6	Number of Years		3		_	3
7	Three Year Average (Line 5 / Line 6)		3,303,549	,	\$	3,416,389
8	Department of Revenue Mutilplier		2		_	2
9	Revenue Base Value (Line 7 * Line 8)		6,607,098	:	\$	6,832,778
10	Plus: 10% of CWIP -		-			-
11	Less: Net Book Value of Licensed Vehicles		-	:	\$	- -
12	Full Cash Value (Line 9 + Line 10 - Line 11)		6,607,098	;	\$	6,832,778
13	Assessment Ratio		20.5%			20.5%
14	Assessment Value (Line 12 * Line 13)		1,354,455		\$	1,400,720
15	Composite Property Tax Rate (Per Company Schedule)		10,1659%			10.1659%
16						
17	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$	137,693			
18	Company Proposed Property Tax		137,972			
19						
20	Staff Test Year Adjustment (Line 17-Line 18)	\$	(279)			
21	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)				\$	142,396
22	Staff Test Year Adjusted Property Tax Expense (Line 17)			;	\$	137,693
23	Increase in Property Tax Expense Due to Increase in Revenue Requirement				\$	4,703
24						
25	Increase to Property Tax Expense			;	\$	4,703
26	Increase in Revenue Requirement					338,521
27	Increase to Property Tax per Dollar Increase in Revenue (Line25/Line 26)					1.389344%

# **Arizona Water Company Cost of Capital Calculation**

Capital Structure
And Weighted Average Cost of Capital
Staff Recommended and Company Proposed

[A]	[B]	[C]	[D]

			Weighted
<u>Description</u>	Weight (%)	Cost	Cost
Staff Recommended Str	ucture		
Debt	49.0%	6.8%	3.3000%
Common Equity	51.0%	9.4%	<u>4.8000%</u>
Weighted Average Cost	of Capital		8.1000%
Company Proposed Stru	cture <sup>1</sup>		
Debt	49.0%	6.8%	3.3000%
Common Equity	51.0%	12.5%	<u>6.4000%</u>
Weighted Average Cost	of Capital		9.7000%

<sup>&</sup>lt;sup>1</sup> Company Schedule D-1, page 2

[D]: [B] x [C]

SURREBUTTAL TESTIMONY OF Jeffrey M. Michlik

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JMM-18	OPERTING INCOME ADJUSTMENT # 9 - PROPERTY TAX EXPENSE

### REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	(	(A) COMPANY FAIR <u>VALUE</u>		(B) STAFF FAIR <u>VALUE</u>
1	Adjusted Rate Base	\$	2,016,750	\$	2,028,644
2	Adjusted Operating Income (Loss)	\$	(28,824)	. \$	42,933
3	Current Rate of Return (L2 / L1)		-1.43%		2.12%
4	Required Rate of Return		9.72%		8.1%
5	Required Operating Income (L4 * L1)	\$	195,980	\$	164,320
6	Operating Income Deficiency (L5 - L2)	\$	224,804	\$	121,387
7	Gross Revenue Conversion Factor		1.6567		1.6566
8	Required Revenue Increase (L7 * L6)	\$	372,441	\$	201,093
9	Adjusted Test Year Revenue	\$	947,528	\$	947,528
10	Proposed Annual Revenue (L8 + L9)	\$	1,319,969	\$	1,148,621
11	Required Increase in Revenue (%)		39.31%		21.22%

References:

Column (A): Company Schedule A-1

Column (B): Staff Schedules JMM-3 and JMM-7

### GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
	Calculation of Gross Revenue Conversion Factor.				
1	Revenue	100.0000%			
2	Uncollecible Factor (Line 11)	0.0000%			
	Revenues (L1 - L2) Combined Federal and State income Tax and Property Tax Rate (Line 23)	100.0000%			
	Subtotal (L3 - L4)	39.6366% 60.3634%			
	Revenue Conversion Factor (L1 / L5)	1.656632			
7	<u>Calculation of Uncollecttible Factor.</u> Unity	100.0000%			
	Combined Federal and State Tax Rate (Line 23)	38.5989%			
	One Minus Combined Income Tax Rate (L7 - L8 )	61.4011%			
	Uncollectible Rate Uncollectible Factor (L9 * L10 )	0.0000% 0.0000%			
	Chamberland (20 ) Ero)				
	Calculation of Effective Tax Rate:	400 00000/			
	Operating Income Before Taxes (Arizona Taxable Income) Arizona State Income Tax Rate	100.0000% 6.9680%			
	Federal Taxable Income (L12 - L13)	93.0320%			
	Applicable Federal Income Tax Rate (Line 55)	34.0000%			
	Effective Federal Income Tax Rate (L14 x L15)	31.6309%	20 5000%		
1/	Combined Federal and State Income Tax Rate (L13 +L16)		38.5989%		
	Calculation of Effective Property Tax Factor				
	Unity	100.0000% 38.5989%			
	Combined Federal and State Income Tax Rate (L17) One Minus Combined Income Tax Rate (L18-L19)	61.4011%			
	Property Tax Factor (JMM-17, L27)	1.6900%			
	Effective Property Tax Factor (L20*L21)		1.0377%	20.62660/	
23	Combined Federal and State Income Tax and Property Tax Rate (L17+L22)		=	39.6366%	
24	Required Operating Income (Schedule JMM-1, Line 5)	\$ 164,320			
25	AdjustedTest Year Operating Income (Loss)	42,933	404.007		
26	Required Increase in Operating Income (L24 - L25)	\$	121,387		
27	Income Taxes on Recommended Revenue (Col. [E], L52)	\$ 61,213			
	Income Taxes on Test Year Revenue (Col. [B], L52)	(15,095)	70.000		
29	Required Increase in Revenue to Provide for Income Taxes (L27 - L28)		76,308		
30	Recommended Revenue Requirement (Schedule JMM-1, Line 10)	\$ 1,148,621			
	Uncollectible Rate (Line 10)	0.0000%			
	Uncollectible Expense on Recommended Revenue (L30*L31) Adjusted Test Year Uncollectible Expense	\$ - \$			
	Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)		•		
		54.420			
35 36		\$ 51,438 48,040			
	Increase in Property Tax Due to Increase in Revenue (L35-L36)		3,398		
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)	_\$	201,093		
		Test		Staff	
	Calculation of Income Tax:	Year		Recommended	
	Revenue (Schedule JMM-7, Col. [C], Line 5 & Sch. JMM-1, Col. [D] Line 10) Operating Expenses Excluding Income Taxes	\$ 947,528 \$ \$ 919,689	201,093	\$ 1,148,621 \$ 923,088	
	Synchronized Interest (L56)	\$ 66,945	_	\$ 66,945	
42	Arizona Taxable income (L39 - L40 - L41)	\$ (39,107)		\$ 158,588	
	Arizona State Income Tax Rate	6.9680% \$ (2,725)		6.9680% \$ 11,050	
	Arizona Income Tax (L42 x L43) Federal Taxable Income (L42 - L44)	\$ (36,382)	•	\$ 147,538	
	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 34%	\$ (12,370)		\$ 17,000	
	Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 34%	\$ <del>-</del>		\$ 8,500	
	Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 34%	\$ - \$ -		\$ 8,500 \$ 16,163	
	Federal Tax on Fifth Income Bracket (\$335,001 -\$10,000,000) @ 34%	\$ -		\$ -	
	Total Federal Income Tax	\$ (12,370)		\$ 50,163	
52	Combined Federal and State Income Tax (L44 + L51)	\$ (15,095)		\$ 61,213	
	J				
53	Applicable Federal Income Tax Rate [Col. [E], L51 - Col. [B], L51] / [Col. [E], L45	- Col. [B], L45]		34.0000%	
	Calculation of Interest Synchronization:				
54	Rate Base (Schedule JMM-3, Col. (C), Line 17	\$ 2,028,644			
55	Weighted Average Cost of Debt	3.3%			
56	Synchronized Interest (L45 X L46)	\$ 66,945			

### **RATE BASE - ORIGINAL COST**

LINE NO.		C	(A) COMPANY AS FILED	(B) STAFF JSTMENTS	Adj. <u>No.</u>	A	(C) STAFF AS ADJUSTED
1 2 3	Plant in Service Less: Accumulated Depreciation Net Plant in Service	\$	4,414,534 1,313,974 3,100,560	\$ 101 - 101		\$	4,414,635 1,313,974 3,100,661
4 5 6	LESS:						
7 8	Contributions in Aid of Construction (CIAC) Less: Accumulated Amortization	\$	742,146 52,037	\$ -		\$ \$	742,146 52,037
9 10	Net CIAC		690,109	-		\$	690,109
11 12	Advances in Aid of Construction (AIAC)		61,297	-			61,297
13 14	Customer Deposits		11,769	-			11,769
15 16	Deferred Income Tax Credits		416,036	•			416,036
17 18 19 20	ADD:						
21 22	Working Capital		95,402	11,792	3		107,194
23 24 25	Deferred Regulatory Assets		-	-			•
26	Original Cost Rate Base	\$	2,016,750	\$ 11,894		\$	2,028,644

References: Column [A]: Company as Filed Column [B]: Schedule JMM-4

Column (C): Column (A) + Column (B)

Arizona Water Company - San Manuel Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

# SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

[E] STAFF <u>ADJUSTED</u>		1.7		\$ 173,434	·-	י י י	2000	•	e			42,932			1,2			•	\$ /4,805		50 520 80 520				2,692	÷	17,340		4,414,635	\$ 4,414,635	250 030	1,313,974	\$ 3,100,661		\$ 742,146	52,037	61,297	11,769	416,036			107,194	•	\$ 2,028,644
[D] <u>ADJ #3</u> Cash Working	Capital Capital Ref: Sch JMM-7	]		,	•	1 1	1 1		,	•		• 1				,				•	1 )	•	•	•	1	r		_		₩		. ,			• <del>•</del>	5	,	,				11,792	•	\$ 11,792
[C] ADJ.#2	Not Used Ref: Sch JMM-6	- S	1 1	•	t						•	1 4			a	•		•	•			•	•	•	•	•		1	•	€			8		· •		•	•				•	ı	<del>ه</del>
[B] <u>ADJ #1</u>	Not Used Ref: Sch JMM-5	, e		•	•	r I		•	•	•	•	•		,		•	1		1			1	1	(419)	1	. 430	070	-		\$ 101			\$ 101		· •			•	1				ı	\$ 101
<u>K</u>	COMPANY AS FILED	\$	473	173,434	~	י צ	2,380	14.110	385,648	•	2,000	42,932 1 378 353	69.500	98,403	1,209,560	100	339,836	122,815	74,805	1 60	1,961	188,350	4,976	29,088	2,692	81.7.2	17,340		4,414,534	\$ 4,414,534	7	1,313,974	\$ 3,100,560		\$ 742,146	52,037	61,297	11,769	416,036			95,402	•	\$ 2,016,750
	RVICE: DESCRIPTION	ost	Franchise Cost Other Intangibles				Wells Dumping Dignt Lond	Fumping Frant Cand Pumping Plant Structures & Improvements	Electric Pumping Equipment	Gas Engine Equipment	Water Treatment Plant - Land	Water Treatment Structures and Improvements	water Treatment Equipment Transmission and Distribution - I and	Storage Tanks	Transmission and Distribution Mains	Fire Sprinkler Taps	Services	Meters	Hydrants	General Plant Land	General Plant Structures		Warehouse Equipment	Tools, Shops, and Garage Equipment	Laboratory Equipment	Power Operated Equipment	Communications Equipment Miscellaneous Equipment	Intentionally Left Blank		Total Plant in Service	:	Less: Accumulated Depreciation	Net Plant in Service		Contributions in Aid of Construction (CIAC)	Less: Accumulated Amortization	Advances in Aid of Construction (AIAC)	Customer Deposits	Deferred income Taxes			Working Capital	d negulatory Assets	Original Cost Rate Base
LINE ACCT. NO. NO.	PLANT IN SERVICE	2 301	3 302 4 303		6 310.3	7 310.4				12 328	13 330									23 389						30 396			34			38 Less: A		41 42 <u>LESS:</u>		44 Less:				64	51 ADD:			55 Origina

### RATE BASE ADJUSTMENT NO. 1 - RUCO RATE BASE ADJUSTMENT

			 [A]		[B]		[C]
LINE NO.	ACCT NO.	DESCRIPTION	 OMPANY ROPOSED		TAFF STMENTS	REC	STAFF OMMENDED
1	Phoenix	Meter Shop		_			
2	394	Tools, Shops, and Garage Equipment	\$ 79,088	\$	(419)	\$	78,669
3	397	Communications Equipment	112,327		520		112,847
4			\$ 191,415	\$	101	\$	191,516
E			 			*****	

### REFERENCES:

Column [A]: Company Filing Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

Surrebuttal Schedule JMM-6

Arizona Water Company - San Manuel Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

RATE BASE ADJUSTMENT NO. 2 - NOT USED

### RATE BASE ADJUSTMENT NO. 3 - CASH WORKING CAPITAL

				[A]		[B]		[C]	[D]	(E)		[F]
LINE	ACCT			COMPANY		AFF		STAFF	1	` '		. ,
NO.	NO.	DESCRIPTION	F	ROPOSED	ADJUS	TMENTS	REC	DMMENDED	ļ			
1		Working Capital	\$	95,402	\$	11,792	\$	107,194	•			
2									•			
3												
4												
5				Test Year					Net	Lead / Lag	Wor	rking Cash
6				Adjusted	Rev	епие	E	xpense	Lag Days	Factor		quirement
7				Results				- <b>-</b> - · · ·	IB - CI	[D + 365]		AXE
8	Staff's Ca	lculation							,,		•	1311-1
9	Purchase	d Power	s	34,138		30.15		30.87	(0.72)	(0.0020)	\$	(67)
10	Pavroli			218,739		30.15		14.00	16.15	0.0443	•	9,680
11	Purchase	d Water		34,138		30.15		26.04	4.11	0.0113		385
12	Chemical	5		3,034		30.15		(18.11)	48.26	0.1322		401
13	Property 8	Liability Insurance		9,086		30,15		(45.27)	75.42	0.2066		1,878
14		's Compensation Insurance		2,078		30.15		(46.50)	76.65	0.2100		436
15	Health Ins			33,958		30.15		(8.92)	39.07	0.1070		3,635
16	Other O&	M (Excluding Rate Case Expense)		378,929		30.15		(9.27)	39.42	0.1080		40,926
17		come Taxes		50,163		30.15		37.00	(6.85)	(0.0188)		(941)
18	State Inco	me Taxes		11,050		30.15		37.00	(6.85)	(0.0188)		(207)
19	FICA Tax	es		16,443		30.15		14.00	16.15	0.0443		728
20		UTA Taxes		545		30.15		83.10	(52,95)	(0.1451)		(79)
21	Property 1			51,438		30,15		212.00	(181.85)	(0.4982)		(25,627)
22		on, Svc. Contracts, & Misc. Fees		8,929		30.15		(98.83)	128.98	0.3534		3,155
23		t Annuities (401k)		17,408		30.15		34.72	(4.57)	(0.0125)		(218)
24				,					(,	(0.0 (20)		(210)
25												
26			\$	870,078							S	34,084
27	5	ubtotal	•	,							•	01,001
28												
29	Interest Ex	pense		67,481		30.15		91.25	(61.10)	(0.1674)		(11,296)
30	Cost of Ed							-	-	(3)		(,200)
31	'	•										
32	s	ubtotal	\$	67,481							\$	(11,296)
33			•								•	(11,200)
34												
35	Т	otal		937,560							\$	22,789
36											<u> </u>	
37	Company	Cash Working Capital									•	10,997
38	puny	out troining outline									Ψ	10,551
39	Increase/(I	Decrease)									\$	11,792
50										=	<del>-</del>	11,732

REFERENCES:
Column [A]: Company Filing
Column [B]: Direct Testimony JMM
Column [C]: Column [A] + Column [B]

### OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND STAFF RECOMMENDED

		C	[A] OMPANY		[B]		[C] STAFF		[D]		<b>[</b> E <b>}</b>
		_	DJUSTED	5	STAFF		ST YEAR		STAFF		
LINE		TE	ST YEAR	TES	ST YEAR		AS	PR	OPOSED		STAFF
<u>NO.</u>	DESCRIPTION	Α	S FILED	ADJU	ISTMENTS	<u>A</u> [	DJUSTED	CI	HANGES	REC	OMMENDED
1	OPERATING REVENUES:										
2	Residential	\$	763,810	\$	-	\$	763,810	\$	201,093	\$	964,903
3	Commercial		159,464		-		159,464		-		159,464
4	Industrial		-		-		-		-		-
5	Private Fire Service		287				287				287
6	Other Water Revenues		8,639				8,639				8,639
7	Total Water Revenues	\$	932,200	\$	•	\$	932,200	\$	201,093	\$	1,133,293
8											
9 ·	Miscellaneous		15,328.00				15,328.00				15,328
10	Total Operating Revenues	\$	947,528	\$	<u> </u>	\$	947,528	\$	201,093	\$	1,148,621
11											
12	OPERATING EXPENSES:										
13	Source of Supply Expenses										
14	Purchased Water	\$	372,967	\$	(82,364)	\$	290,603	\$	-	\$	290,603
15	Other		2,637		(58)		2,579		-		2,579
16	Pumping Expenses										
17	Purchased Power		34,056		82		34,138		-		34,138
18	Purchased Gas		-		<u>.                                    </u>				-		
19	Other		49,207		(3,972)		45,235		-		45,235
20	Water Treatment Expenses		55,225		(9,616)		45,609		-		45,609
21	Transmission and Distribution Expenses		103,578		(14,533)		89,045		-		89,045
22	Customer Accounting Expenses		109,168		(1,576)		107,592		-		107,592
23	Sales Expense				<u>-</u>		·		-		
24	Administrative and General Expenses		134,260		(5,002)		129,258				129,258
25	Total Operation and Maintenance Expense		861,098		(117,039)		744,059		-		744,059
26											
27	Depreciation and Amortization Expenses		112,938		18		112,956				112,956
28	-										
29	Taxes		(10.010)		07.040		(40.070)		00.500		50.400
30	Federal Income Taxes		(49,612)		37,242		(12,370)		62,533		50,163
31	State Income Taxes		(10,929)		8,204		(2,725)		13,775		11,050
32	Property Taxes		48,221		(181)		48,040		3,398		51,438
33	Other		14,635		45.005		14,635		70.700		14,635
34	Total Taxes		2,315		45,265		47,580		79,706		127,286
35			-		-		-		-		-
36	Total Occasion Frances		076 356				904,595		79,706		984,301
37	Total Operating Expenses		976,351				904,595		19,100		904,301
38 39	Operating Income (Loss)	æ	(28,824)	\$	71,757	\$	42,933	\$	121,387	\$	164,320
38	Operating income (LOSS)	Ψ	(20,024)		71,757	<u> </u>	72,000	<u>Ψ</u>	121,001		104,020

References:
Column (A): Company Schedule C-1
Column (B): Schedule JMM-9
Column (C): Column (A) + Column (B)
Column (D): Schedules JMM-17 and JMM-18
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME STATEMENT ADJUSTMENTS - TEST YEAR

[K] STAFF ADJUSTED	\$ 763,810 159,464	\$ 8,639 \$ 932,200	\$ 15,328	•	290,603	34,138	45,235	89,045	- 129.258	\$ 744,059	112,956	m22 (11)	(2,725)		\$ 904.595
(J) Properly Expense ADJ #89		.,	5	,					, ,		: '		(181)	\$ (181) \$	\$ (181) \$
(I) Income Tax Expense ADJ#8	۰.,	6								•	٠.	37,242	8,204	\$ 45,446	45,446
(H) Not Used ADJ #7 Ref: Sch JMM-16	, , , <u>,</u>	\$	\$	· ·		. , ,					. 18		٠.		18
(G) Rate Case Expense ADJ #6 Ref. Sch.JMM-15				,					(4,091)			•			(4,091)
[F] Purchased Water Expense ADJ#5 Ref: Sch JMM-14	•		\$	(82,364)		٠.			(82,364) \$						(82,364) \$
(E) Water Testing Expense & RUCO Miscellaneous Expense Adjustment ADJ #4 Ref. Sch JMM-13			\$	•			(9,510)		(9,972) \$	•					\$ (2/8/8)
Removal of Pumping Transmission and Distribution Projection ADJ #3 Ref. Sch.JMM.12	, , , ,	,				(3,883)	(12,906)	• 1	(16,788) \$	•	,			(16.788) \$	16.788 \$
Fleet Fuel Tr Expense ADJ #2 Ref. Sch.JMM.11.				<b>(6)</b>	,	(62)	(312) (312)	(tc) - (5)	(561) \$			٠.		(561) \$	561 \$
[B]  Reverse Unbilled  Expenses  ADJ#1  Ref: Sch_JMM-10   F		6		- (48)	82	, <b>•</b> 8	(1,315) (1,492)	(419)	(3,263) \$	•			5.	(3,263) \$	3,263 \$
(A)  COMPANY ASFILED  \$ 763,810 \$ 159,464	287 8,639 \$ 932,200 \$	\$ 15,328 \$ 947,528 \$	372 087	2,637	34,056	49,207 55,225	103,578		\$ 861,098 \$	0.56,310	(49,612)	(10,929) 48,221	\$ 2,315 \$	\$ 976,351 \$	\$ (28,824) \$
UINE ACCT.  NO. NO.  1 OPERATING REVENUES: 2 Residential 3 Commercial 4 Industrial	5 Private Fire Service 6 Other Water Revenues 7 Total Water Revenues 8	9 Miscellaneous 10 Total Operating Revenues 11	Source	15 Other 16 Pumping Expenses	17 Purchased Power 18 Purchased Gas	20 Water Treatment Expenses	21 Transmission and Distribution Expenses 22 Customer Accounting Expenses 23 Sales Expense	24 Administrative and General Expenses 25 Total Operation and Maintenance Expenses		28 29 Taxes	30 Federal Income Taxes 31 State Income Taxes		Total Ta	36 Total Operating Expenses	38 Operating Income (Loss)

# OPERATING INCOME ADJUSTMENT NO. 1 - REVERSE UNBILLED EXPENSES

			[A]		[B]		[C]
LINE		1	COMPANY		STAFF		STAFF <sup>1</sup>
NO.	DESCRIPTION	1	PROPOSED	Α	DJUSTMENTS_	RE	COMMENDED
1	Residential	\$	763,810	\$	-	\$	763,810
2	Commercial		159,464		-		159,464
3	Industrial				-		-
4	Revenue Adjustments	\$	923,274	\$		\$	923,274
5	·						
6	Source Supply - Other	\$	2,589	\$	-	\$	2,589
7	Unbilled Expenses		48		(48)		
8	Total Source Supply - Other	\$	2,637	\$	(48)	\$	2,589
9	•••						
10	Purchased Power	\$	34,138	\$	-	\$	34,138
11	Unbilled Expenses		(82)		82		<u> </u>
12	Total Purchased Power	\$	34,056	\$	82	\$	34,138
13							
14	Pumping Expense - Other	\$	49,213	\$	-	\$	49,213
15	Unbilled Expenses		(6)		6		<u> </u>
16	Total Pumping Expense - Other	\$	49,207	\$	6	\$	49,213
17	, , ,						
18	Water Treatment Expenses	\$	55,148	\$	-	\$	55,148
19	Unbilled Expenses		_77		(77)		
20	Total Water Treatment Expenses	\$	55,225	\$	(77)	\$	55,148
21							
22	Transmission and Distribution Expenses	\$	102,263	\$	•	\$	102,263
23	Unbilled Expenses		1,315		(1,315)		
24	Total Transmission and Distribution Expenses	\$	103,578	\$	(1,315)	\$	102,263
25							
26	Customer Accounting Expenses	\$	107,676	\$	•	\$	107,676
27	Unbilled Expenses		1,492		(1,492)		
28	Total Customer Accounting Expenses	\$	109,168	\$	(1,492)	\$	107,676
29	•						
30	Administrative and General Expenses	\$	133,841	\$	•	\$	133,841
31	Unbilled Expenses		419		(419)		
32	Total Administrative and General Expenses	\$	134,260	\$	(419)	\$	133,841
33	,						
34	Total Expense Adjustments	\$	488,131	\$	(3,263)	\$	484,868
•							

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References: Column (A), Company Schedule C-1 Column (B): Testimony JMM Column (C): Column (A) + Column (B)

### OPERATING INCOME ADJUSTMENT NO. 2 - FLEET FUEL EXPENSE

			[A]		(B)		[C]
LINE			COMPANY	T	STAFF		STAFF1
NO.	DESCRIPTION		PROPOSED	Δ.	DJUSTMENTS		ECOMMENDED
1	Source Supply - Other	\$	947,481	\$	-	\$	947,481
2	Fleet Fuel Expenses		47		(9)		38_
3	Total Source Supply - Other	\$	947,528	\$	(9)	\$	947,519
4							
5	Pumping Expense - Other	\$	48,730	\$	-	\$	48,730
6	Fleet Fuel Expenses		477		(95)		381
7	Total Pumping Expense - Other	\$	49,207	\$	(95)	\$	49,112
8							
9	Water Treatment Expenses	\$	55,077	\$	-	\$	55,077
10	Fleet Fuel Expenses		148		(30)		118
11	Total Water Treatment Expenses	\$	55,225	\$	(30)	\$	55,195
12	·						
13	Transmission and Distribution Expenses	\$	70,860	\$	-	\$	70,860
14	Fleet Fuel Expenses	•	32,718		(312)		32,406
15	Total Transmission and Distribution Expenses	\$	103,578	\$	(312)	\$	103,266
16	,	-					
17	Customer Accounting Expenses	\$	100,349	\$	-	\$	100,349
18	Fleet Fuel Expenses	*	8,819	•	(84)	,	8,735
19	Total Customer Accounting Expenses	\$	109,168	\$	(84)	\$	109,084
20	,						
21	Administrative and General Expenses	\$	134,108	\$		\$	134,108
22	Fleet Fuel Expenses	•	152	•	(30)	•	122
23	Total Administrative and General Expenses	\$		\$	(30)	\$	134,230
24	•						
25	Total Expense Adjustments	\$	1,398,966	\$	(561)	\$	1,398,405
26							
27							
28	Staff's Calculation based on the most recent 12	mont	h gas price of \$ 3.38				
29	Contraction and Contraction an						
30			Company Pro-forma	Stat	ff's Recalculation		Reduction
31	Source Supply - Other	\$	47	\$	38	\$	9
32	Pumping Expenses Other	•	477		381		95
33	Water Treatment Expenses		148		118		30
34	Transmission and Distribution Expenses		1,556		1,245		312
35	Customer Accounting Expenses		419		335		84
36	Administrative and General Expenses		152		122		30
37	Totals	\$	2,800	\$	2,239	\$	561

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References:
Column (A), Company Schedule C-1
Column (B): Testimony JMM
Column (C): Column (A) + Column (B)

### OPERATING INCOME ADJUSTMENT NO. 3 - REMOVAL OF PROJECTED EXPENSES

		[A]	[B]		[C]
LINE NO.	DESCRIPTION	COMPANY PROPOSED	STAFF ADJUSTMENTS	RE	STAFF <sup>1</sup> COMMENDED
1	Pumping Expenses - Other	\$ 45,324	\$ -	\$	45,324
2	Normalization of Pumping Expenses	 3,883	 (3,883)	\$	(0)
3	Total Pumping Expense - Other	\$ 49,207	\$ (3,883)	\$	45,324
4			 		
5	Transmission and Distribution Expenses	\$ 90,672	\$ -	\$	90,672
6	Normalization of Transmission and Distribution Expenses	 12,906	(12,906)		0
7	Total Transmission and Distribution Expenses	\$ 103,578	\$ (12,906)	\$	90,672

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

### References:

Column (A), Company Schedule C-1

Column (B): Testimony JMM

Column (C): Column (A) + Column (B)

### OPERATING INCOME ADJUSTMENT NO. 4 - WATER TESTING EXPENSE AND RUCO MISCELLANEOUS EXPENSE ADJUSTMENT

		[A]	[B]	 [C]
LINE		COMPANY	STAFF	STAFF <sup>1</sup>
NO.	DESCRIPTION	PROPOSED	ADJUSTMENTS	RECOMMENDED
1	Water Treatement Expenses	\$ 55,225	\$ (9,510)	\$ 45,715
2	Administrative and General Expenses	 134,260	 (462)	133,798
		\$ 189,485	\$ (9,972)	\$ 179,513

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References: Column (A), Company Schedule C-1 Column (B): Testimony JMM Column (C): Column (A) + Column (B)

# OPERATING INCOME ADJUSTMENT NO. 5 - WATER TESTING EXPENSE AND RUCO MISCELLANEOUS EXPENSE ADJUSTMENT

		[A]	[B]	[C]
LINE		COMPANY	STAFF	STAFF1
NO.	DESCRIPTION	PROPOSED	ADJUSTMENTS	RECOMMENDED
	Purchased Water	\$ 372,967	\$ (82,364)	\$ 290,603

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References; Column (A), Company Schedule C-1 Column (B): Testimony JMM Column (C): Column (A) + Column (B)

# OPERATING INCOME ADJUSTMENT NO. 6 - RATE CASE EXPENSE

5	STAFF <sup>1</sup>	127,709 2,460 130,169
[8]	STAFF	(4,091) \$ (4,091) \$
[A]	COMPANY	\$ 127,709 \$ 6,551 \$ 134,260 \$
	DESCRIPTION	Administrative and General Expenses Rate Case Expense Pro Forma Total Administrative and General
	LINE NO	- 28

Staff's Calculation of Rate Case Expense for Pinal Valley

	מופי וומו מופי בילה בילה בילה וומו מופי	I Hall Valley							
				[A]	[8]	[0]	[0]	E	
Line No.	-		Average Number of Customers	T.Y. 2010 Rate Case Expense Estimate / Spread	Normalization Period <u>in Years</u>	Annual Amortization / Pro Forma <u>Rate Case Exp.</u>	T.Y. 2010 Prior Rate Case Expense Charged to	Increase /	. a
N	All Systems								
ი.	u.	Pinal Valley	28,030	206,277.86	က	,			
4 (	>	White Tank	1,927	14,177.38	က				
2	et.	λjo	629	4.997.47					
9	O)	Superstition	23,792	175,085,54	) er				
7	0	Cochise	6,404	47,130,98	) er				
æ	5	San Manuel	1,476	10,860.25	o e:	3 620	4 400	•	
6	0	Oracle	1,521	11,189.57	o er	2,020	\$ 091.'I	7	2,460
9	o)	SaddleBrooke Ranch	. 89	651.28	· "				
7	^	Winkelman	157	1.152.32	) er				
7	~	Navajo	060'6	66,897.02	· er				
<u>ლ</u>	>	Verde Valley	10,569	77,779,34	, rc				
4 10			83,733	616,199	1				
16	Rate Case Expense Incurred Last Time		<b>∞</b>	616,199					
<u> </u>	Company Proposed Rate Case Expense Pro Forma	о Forma					49	ထ	6.551
2 2	Staff Adjustment to Rate Case Expense						•	)	
ŀ							€\$	(4	(4,091)

<sup>1</sup> Amounts do not reflect other adjustments.

References: Column (A), Company Schedule C-1 Column (B): Testimony JMM Column (C): Column (A) + Column (B)

### OPERATING INCOME ADJUSTMENT NO. 7 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

			[A]	[B]	[C]	[D]	[E]
			PLANT In	NonDepreciable	DEPRECIABLE		DEPRECIATION
LINE	ACCT	}	SERVICE	or Fully Depreciated	PLANT	DEPRECIATION	EXPENSE
NO.	NO.	DESCRIPTION	Per Staff	PLANT	(Col A - Col B)	RATE	(Col C x Col D)
1	301	Organization Cost	\$ 11	\$ 11	\$ -	0.00%	
2	302	Franchise Cost	\$ -	\$ -	\$ -	4.00%	
3	303	Other Intangibles	\$ 473	\$ -	\$ 473	5.07%	\$ 24
4	310.1	Water Rights	\$ 173,434	\$ -	\$ 173,434	0.00%	\$ -
5	310.3	Other Source of Supply Land	\$ 1	\$ -	\$ 1	0.00%	\$ -
6	310.4	Wells - Other	\$ -	\$ -	\$ -	2.50%	\$ -
7	314	Wells	\$ 5,560	\$ -	\$ 5,560	3.13%	
8	320	Pumping Plant Land	\$ 7,000	\$ -	\$ 7,000	0.00%	
9	321	Pumping Plant Structures & Improvements	\$ 14,110	\$ -	\$ 14,110	2.86%	\$ 404
10	325	Electric Pumping Equipment	\$ 385,648	\$ -	\$ 385,648	5.88%	
11	328	Gas Engine Equipment	\$ -	\$ -	\$ -	4.00%	
12	330	Water Treatment Plant - Land	\$ 2,000	\$	\$ 2,000	0.00%	
13	331	Water Treatment Structures and Improvements	\$ 42,932	\$	\$ 42,932	2.50%	
14	332	Water Treatment Equipment	\$ 1,378,353	\$ -	\$ 1,378,353	2.86%	
15	340	Transmission and Distribution - Land	\$ 69,500	\$	\$ 69,500	0.00%	\$ -
16	342	Storage Tanks	\$ 98,403	\$	\$ 98,403	2.00%	\$ 1,968
17	343	Transmission and Distribution Mains	\$ 1,209,560	\$ -	\$ 1,209,560	1.79%	\$ 21,651
18	344	Fire Sprinkler Taps	\$ 100	\$ -	\$ 100	2.00%	\$ 2
19	345	Services	\$ 339,836	\$ -	\$ 339,836	2.38%	
20	346	Meters	\$ 122,815	\$ -	\$ 122,815	4.55%	\$ 5,588
21	348	Hydrants	\$ 74,805	\$ -	\$ 74,805	1.82%	
22	389	General Plant Land	\$ -	\$ -	\$ -	0.00%	
23	390	General Plant Structures	\$ 21,981	\$ -	\$ 21,981	2.50%	\$ 550
24	390.1	Leasehold improvements	\$ 60,520	\$ -	\$ 60,520	0.73%	
25	391	Office Furniture & Equipment	\$ 188,350		\$ 188,350	6.67%	
26	393	Warehouse Equipment	\$ 4,976	\$ -	\$ 4,976	5.00%	
27	394	Tools, Shops, and Garage Equipment	\$ 78,669		\$ 78,669	4.00%	
28	395	Laboratory Equipment	\$ 2,692	\$ -	\$ 2,692	5.00%	
29	396	Power Operated Equipment		\$ -	\$ 2,719	6.67%	
30	397	Communications Equipment	\$ 112,847		\$ 112,847	6.67%	
31	398	Miscellaneous Equipment	\$ 17,340	\$ -	\$ 17,340	3.33%	<b>\$</b> 577
32		Intentionally Left Blank					
33		Total Plant	\$ 4,414,635	\$ 11	\$ 4,414,625		\$ 127,799
34							
35		Composite Depreciation Rate (Depr Exp / Depreciable Plant):	2.00%				
36		CIAC:_					
37		Amortization of CIAC (Line 35 x Line 36):	\$ 14,843				
38							
39		Depreciation Expense Before Amortization of CIAC:					
40		Less Amortization of CIAC:					
41		Test Year Depreciation Expense - Staff:					
42		Depreciation Expense - Company:					
43		Staff's Total Adjustment: _	\$ 18	:			

References:
Column [A]: Schedule JMM-4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

### OPERATING INCOME ADJUSTMENT NO. 8 - TEST YEAR INCOME TAXES

LINE NO.	DESCRIPTION	COMPANY PROPOSED	STAFF ADJUSTMENTS	STAFF RECOMMENDED
1	Federal Income Taxes	\$ (49,612)	\$ 37,242	\$ (12,370)
2	State Income Taxes	 (10,929)	 8,204	(2,725)
3	Federal and State Income Taxes	\$ (60,541)	\$ 45,446	\$ (15,095)

References:

Column (A), Company Schedule C-1 Column (B): Column [C] - Column [A] Column (C): Schedule JMM-2

# OPERATING INCOME ADJUSTMENT NO. 9 - PROPERTY TAX EXPENSE

			[A]		[B]
LINE			STAFF		STAFF
NO.	Property Tax Calculation	AS	ADJUSTED	REC	OMMENDED
1	Staff Adjusted Test Year Revenues	\$	947,528	\$	947,528
2	Weight Factor		2		2
3	Subtotal (Line 1 * Line 2)		1,895,056	\$	1,895,056
4	Staff Recommended Revenue, Per Schedule JMM-1		947,528	\$	1,148,621
5	Subtotal (Line 4 + Line 5)		2,842,584		3,043,677
6	Number of Years		3		3
7	Three Year Average (Line 5 / Line 6)		947,528	\$	1,014,559
8	Department of Revenue Mutilplier		2		2
9	Revenue Base Value (Line 7 * Line 8)		1,895,056	\$	2,029,118
10	Plus: 10% of CWIP -		-		-
11	Less: Net Book Value of Licensed Vehicles		-	\$	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)		1,895,056	\$	2,029,118
13	Assessment Ratio		20.5%		20.5%
14	Assessment Value (Line 12 * Line 13)		388,486	\$	415,969
15	Composite Property Tax Rate (Per Company Schedule)		12.3658%		12.3658%
16					
17	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$	48,040		
18	Company Proposed Property Tax		48,221		
19					
20	Staff Test Year Adjustment (Line 17-Line 18)	\$	(181)		
21	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)			\$	51,438
22	Staff Test Year Adjusted Property Tax Expense (Line 17)			\$	48,040
23	Increase in Property Tax Expense Due to Increase in Revenue Requirement			\$	3,398
24					
25	Increase to Property Tax Expense			\$	3,398
26	Increase in Revenue Requirement			•	201,093
27	Increase to Property Tax per Dollar Increase in Revenue (Line25/Line 26)				1.689997%
21	moreage to respectly rax per bonds moreage in November (Emelor Ed)				

# **Arizona Water Company Cost of Capital Calculation**

Capital Structure
And Weighted Average Cost of Capital
Staff Recommended and Company Proposed

[A]	[B]	[C]	[D]
			Weighted
<u>Description</u>	Weight (%)	<u>Cost</u>	<u>Cost</u>
Staff Recommended Str	ructure		
Debt	49.0%	6.8%	3.3000%
Common Equity	51.0%	9.4%	<u>4.8000%</u>
Weighted Average Cost	of Capital		8.1000%
Company Proposed Stru	ucture <sup>1</sup>		
Debt	49.0%	6.8%	3.3000%
Common Equity	51.0%	12.5%	<u>6.4000%</u>
Weighted Average Cost	of Capital		9.7000%

<sup>&</sup>lt;sup>1</sup> Company Schedule D-1, page 2

[D]: [B] x [C]

SURREBUTTAL TESTIMONY OF Jeffrey M. Michlik

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JMM-18	OPERTING INCOME ADJUSTMENT # 9 - PROPERTY TAX EXPENSE

### REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	C	(A) COMPANY FAIR <u>VALUE</u>	(B) STAFF FAIR <u>VALUE</u>
1	Adjusted Rate Base	\$	2,470,183	\$ 2,482,015
2	Adjusted Operating Income (Loss)	\$	163,349	\$ 186,718
3	Current Rate of Return (L2 / L1)		6.61%	7.52%
4	Required Rate of Return		9.72%	8.1%
5	Required Operating Income (L4 * L1)	\$	240,043	\$ 201,043
6	Operating Income Deficiency (L5 - L2)	\$	76,693	\$ 14,326
7	Gross Revenue Conversion Factor		1.6508	1.6519
8	Required Revenue Increase (L7 * L6)	\$	126,601	\$ 23,664
9	Adjusted Test Year Revenue	\$	990,109	\$ 990,109
10	Proposed Annual Revenue (L8 + L9)	\$	1,116,710	\$ 1,013,773
11	Required Increase in Revenue (%)		12.79%	2.39%

### References:

Column (A): Company Schedule A-1

Column (B): Staff Schedules JMM-3 and JMM-7

### GROSS REVENUE CONVERSION FACTOR

LINE NO.	DESCRIPTION	(A)	(B)	(C)	(D)
2 3 4 5	Calculation of Gross Revenue Conversion Factor: Revenue Uncollecible Factor (Line 11) Revenues (L1 - L2) Combined Federal and State Income Tax and Property Tax Rate (Line 23) Subtotal (L3 - L4) Revenue Conversion Factor (L1 / L5)	100.0000% 0.0000% 100.0000% 39.4635% 60.5365% 1.651897			
8 9 10	<u>Calculation of Uncollecttible Factor:</u> Unity Combined Federal and State Tax Rate (Line 23) One Minus Combined Income Tax Rate (L7 - L8) Uncollectible Rate Uncollectible Factor (L9 * L10)	100.0000% 38.5989% 61.4011% 0.0000% 0.0000%			
13 14 15 16	Calculation of Effective Tax Rate: Operating Income Before Taxes (Arizona Taxable Income) Arizona State Income Tax Rate Federal Taxable Income (L12 - L13) Applicable Federal Income Tax Rate (Line 55) Effective Federal Income Tax Rate (L14 x L15) Combined Federal and State Income Tax Rate (L13 +L16)	100.0000% 6.9680% 93.0320% 34.0000% 31.6309%	38.5989%		
19 20 21 22	Calculation of Effective Property Tax Factor Unity Combined Federal and State Income Tax Rate (L17) One Minus Combined Income Tax Rate (L18-L19) Property Tax Factor (JMM-17, L27) Effective Property Tax Factor (L20*L21) Combined Federal and State Income Tax and Property Tax Rate (L17+L22)	100.0000% 38.5989% 61.4011% 	0.8646%	39.4635%	
24 25 26	Required Operating Income (Schedule JMM-1, Line 5) AdjustedTest Year Operating Income (Loss) Required Increase in Operating Income (L24 - L25) Income Taxes on Recommended Revenue (Col. [E], L52)	\$ 201,043 186,718 \$ 74,893	14,326		
28 29 30 31	Income Taxes on Test Year Revenue (Col. [B], L52) Required Increase in Revenue to Provide for Income Taxes (L27 - L28)  Recommended Revenue Requirement (Schedule JMM-1, Line 10) Uncollectible Rate (Line 10) Uncollectible Expense on Recommended Revenue (L30*L31)	\$ 1,013,773 0.0000%	9,006		
33 34 35 36 37	Adjusted Test Year Uncollectible Expense Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)  Property Tax with Recommended Revenue (JMM-17, Col B, L31) Property Tax on Test Year Revenue (JMM-17, Col A, L17) Increase in Property Tax Due to Increase in Revenue (L35-L36)	\$ 42,161 41,828	333 23,664		
39	Total Required Increase in Revenue (L26 + L29 + L34 + L37)  Calculation of Income Tax:  Revenue (Schedule JMM-7, Col. [C], Line 5 & Sch. JMM-1, Col. [D] Line 10)	Test Year \$ 990,109 \$		Staff Recommended \$ 1,013,773	
41 42 43 44	Operating Expenses Excluding Income Taxes Synchronized Interest (L56) Arizona Taxable Income (L39 - L40 - L41) Arizona State Income Tax Rate Arizona income Tax (L42 x L43) Federal Taxable Income (L42 - L44)	\$ 737,503 \$ 81,907 \$ 170,699 6.9680% \$ 11,894 \$ 158,805	_	\$ 737,837 \$ 81,907 \$ 194,030 6.9680% \$ 13,520 \$ 180,510	
46 47 48 49 50 51	Federal Tax on First Income Bracket (\$1 - \$50,000) @ 34% Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 34% Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 34% Federal Tax on Fifth Income Bracket (\$335,001 - \$10,000,000) @ 34% Total Federal Income Tax	\$ 17,000 \$ 8,500 \$ 8,500 \$ 19,994 \$ - \$ 53,994		\$ 17,000 \$ 8,500 \$ 8,500 \$ 27,373 \$ - \$ 61,373	
	Combined Federal and State Income Tax (L44 + L51)  Applicable Federal Income Tax Rate [Col. [E], L51 - Col. [B], L51] / [Col. [E], L45		=	34.0000%	
55	Calculation of Interest Synchronization: Rate Base (Schedule JMM-3, Col. (C), Line 17 Weighted Average Cost of Debt Synchronized Interest (L45 X L46)	\$ 2,482,015 3.3% \$ 81,907			

### **RATE BASE - ORIGINAL COST**

LINE NO.		C	(A) COMPANY AS <u>FILED</u>		(B) STAFF ISTMENTS	Adj. <u>No.</u>	£	(C) STAFF AS ADJUSTED
1 2 3	Plant in Service Less: Accumulated Depreciation Net Plant in Service	\$ _\$_	7,436,010 2,829,383 4,606,627	\$	29,823 - 29,823	1	\$	7,465,833 2,829,383 4,636,450
4 5 6	LESS:							
7 8	Contributions in Aid of Construction (CIAC) Less: Accumulated Amortization	\$	1,006,130 140,146	\$	-		\$ \$	1,006,130 140,146
9 10	Net CIAC		865,984	<del> </del>	-		\$	865,984
11 12	Advances in Aid of Construction (AIAC)		814,160		-			814,160
13 14	Customer Deposits		12,126		-			12,126
15 16 17	Deferred Income Tax Credits		517,509		-			517,509
18 19	ADD:							
20 21 22	Working Capital		73,335		(17,991)	3		55,344
23 24 25	Deferred Regulatory Assets		-		-			-
26 26	Original Cost Rate Base	\$	2,470,183	\$	11,832		\$	2,482,015

References: Column [A]: Company as Filed Column [B]: Schedule JMM-4

Column (C): Column (A) + Column (B)

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

[E] STAFF <u>ADJUSTED</u>	5 13 591 591 54695	\$ 480,265 \$ 2,742 \$ 91,283 \$ 888,754 \$ .	, a		\$ 7,465,833 2,829,383 \$ 4,636,450 \$ 1,006,130 140,146 865,984 814,160 12,126 517,509	55,344 - - \$ 2,482,015
[D] <u>ADJ #3</u> Cash Working	Sef: Sch JMM-7					(17,991)
[C] ADJ #2	Not Used Ref: Sch JMM-6				6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	φ.
[8] ADJ#1	RUCO Adjustment Ref: Sch JMM-5		64.895 (35,198)	(522)	\$ 29,823	\$ 29,823
<u>A</u>	COMPANY  AS FILED  13  129,139 24,695	24,095 480,265 2,742 91,283 888,754	35,054 71,579 19,680 306,126 3,927,134 7,19,561 112,379	158,971 147,431 31,479 103,350 1,991 29,686 238 1,161 147,864 4,845	\$ 7,436,010 2,829,383 \$ 4,606,627 \$ 1,006,130 140,146 865,984 814,160 12,126 517,509	73,335 - \$ 2,470,183
	RVICE:  DESCRIPTION Organization Cost Franchise Cost Other Intangibles Water Rights				Total Plant in Service Less: Accumulated Depreciation Net Plant in Service LESS: Contributions in Aid of Construction (CIAC) Less: Accumulated Amortization Net CIAC (L25 - L26) Advances in Aid of Construction (AIAC) Customer Deposits Deferred Income Taxes	<u>ADD:</u> Working Capital Deffered Regulatory Assets Original Cost Rate Base
LINE ACCT.	PLANT IN SERVICE: 1 301 Orga 3 302 Frant 4 303 Other 5 310.1 Wate	6 310.3 7 310.4 8 314 9 320 10 321 11 325 12 330			•	50 51 <u>AL</u> 52 Woi 53 Deff 54 Orti

### RATE BASE ADJUSTMENT NO. 1 - RUCO RATE BASE ADJUSTMENT

				[A]		[B]		[C]
LINE	ACCT		C	OMPANY		STAFF		STAFF
NO.	NO.	DESCRIPTION	P	ROPOSED	ADJ	USTMENTS	RE	COMMENDED
1	343	Transmission and Distribution Mains	\$	3,927,134	\$	64,895	\$	3,992,029
2	345	Services		719,561		(35,198)		684,363
3			\$	4,646,695	\$	29,697	\$	4,676,392
4								
5	Phoenix	Meter Shop						
6	394	Tools, Shops, and Garage Equipment	\$	29,686	\$	(522)	\$	29,164
7	397	Communications Equipment		147,864		647		148,511
8			\$	177,550	\$	126	\$	177,676
0								

### REFERENCES:

Column [A]: Company Filing Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

Surrebuttal Schedule JMM-6

Arizona Water Company - Oracle Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

RATE BASE ADJUSTMENT NO. 2 - NOT USED

#### RATE BASE ADJUSTMENT NO. 3 - CASH WORKING CAPITAL

			[A]	[B]	[C]	[D]	[E]		[F]
LINE	ACCT		COMPANY	STAFF	STAFF	1			
NO.	NO.	DESCRIPTION	ROPOSED	ADJUSTMENTS		]			
1		Working Capital	\$ 73,335	\$ (17,991	) \$ 55,344	-			
2						=			
3									
4									
5			Test Year			Net	Lead / Lag		king Cash
6			Adjusted	Revenue	Expense	Lag Days	Factor		quirement
7			Results			[B - C]	[D ÷ 365]	L	AXEI
8	Staff's Ca								
9	Purchase	d Power	\$ 107,256	30.10	30.87	(0.77)	(0.0021)	\$	(226)
10	Payroli		195,535	30.10	14.00	16.10	0.0441		8,626
11	Purchase		-	. 30.10	(55.31)	85.41	0.2340		-
12	Chemical		3,859	30.10	(18.11)	48.21	0.1321		510
13		& Liability Insurance	11,303	30.10	(45.27)	75.37	0.2065		2,334
14		's Compensation Insurance	2,585	30.10	(46.50)	76.60	0.2099		543
15	Health Ins		34,962	30.10	(8.92)	39.02	0.1069		3,738
16		M (Excluding Rate Case Expense)	117,573	30.10	(9.27)	39.37	0.1079		12,682
17		come Taxes	61,373	30.10	37.00	(6.90)	(0.0189)		(1,160)
18	State Inco	me Taxes	13,520	30.10	37.00	(6.90)	(0.0189)		(256)
19	FICA Tax		14,659	30.10	14.00	16.10	0.0441		647
20		UTA Taxes	479	30.10	83,10	(53.00)	(0.1452)		(70)
21	Property 7		42,161	30.10	212.00	(181.90)	(0.4984)		(21,011)
22		on, Svc. Contracts, & Misc. Fees	11,107	30.10	(98.83)	128,93	0.3532		3,924
23	Retiremen	t Annuities (401k)	17,922	30.10	34.72	(4.62)	(0.0127)		(227)
24									
25			 						
26			\$ 634,295					\$	10,053
27	S	Subtotal							
28									
29	Interest Ex		82,653	30,10	91.25	(61.15)	(0.1675)		(13,847)
30	Cost of Eq	uity	-	-	-	-	-		-
31			 						
32	S	Subtotal	\$ 82,653					\$	(13,847)
33									
34			 						
35	• т	otal otal	 716,948					\$	(3,794)
36			 						
37	Company	Cash Working Capital						\$	14,197
38		•							-
39	Increase/(	Decrease)					=	\$	(17,991)

REFERENCES:
Column [A]: Company Filing
Column [B]: Direct Testimony JMM
Column [C]: Column [A] + Column [B]

## OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND STAFF RECOMMENDED

		C	[A] OMPANY		[B]		[C] STAFF		[D]	[E]				
			ADJUSTED TEST YEAR		STAFF TEST YEAR STAFF									
LINE					ST YEAR		AS		OPOSED		STAFF			
<u>NO.</u>	DESCRIPTION	A	S FILED	<u>ADJL</u>	<u>ISTMENTS</u>	<u>A[</u>	DJUSTED	CH	IANGES	REC	OMMENDED			
1	OPERATING REVENUES:													
2	Residential	\$	801,054	\$	-	\$	801,054	\$	23,664	\$	824,718			
3	Commercial		156,437		-		156,437		-		156,437			
4	Industrial		•		-		-		-		=			
5	Private Fire Service		283				283				283			
6	Other Water Revenues		19,841		-		19,841		-	_	19,841			
7	Total Water Revenues	\$	977,615	\$	-	\$	977,615	\$	23,664	\$	1,001,279			
8			,											
9	Miscellaneous		12,494.00				12,494.00				12,494			
10	Total Operating Revenues	\$	990,109	\$	-	\$	990,109	\$	23,664	\$	1,013,773			
11														
12	OPERATING EXPENSES:													
13	Source of Supply Expenses													
14	Purchased Water	\$	•	\$	-	\$	-	\$	-	\$	-			
15	Other		5,203		(62)		5,141		-		5,141			
16	Pumping Expenses													
17	Purchased Power		107,154		102		107,256		-		107,256			
18	Purchased Gas		-		-		-		-		=			
19	Other		39,396		(5,066)		34,330		-		34,330			
20	Water Treatment Expenses		17,008		(105)		16,903		-		16,903			
21	Transmission and Distribution Expenses		127,733		(29,482)		98,251		-		98,251			
22	Customer Accounting Expenses		103,050		(754)		102,296		•		102,296			
23	Sales Expense		-		-		-		-		-			
24	Administrative and General Expenses		147,197		(5,541)		141,656				141,656			
25	Total Operation and Maintenance Expense		546,739		(40,907)		505,832		-		505,832			
26														
27	Depreciation and Amortization Expenses		176,809		347		177,156				177,156			
28														
29	Taxes													
30	Federal Income Taxes		41,571		12,423		53,994		7,380		61,373			
31	State Income Taxes		9,158		2,736		11,894		1,626		13,520			
32	Property Taxes		39,795		2,033		41,828		333		42,161			
33	Other		12,688		<del></del>		12,688				12,688			
34	Total Taxes		103,212		17,192		120,404		9,339		129,743			
35			-		-		-		•		-			
36											040.700			
37	Total Operating Expenses		826,760				803,391		9,339		812,730			
38		•	400.045	•	00.000	•	406 740	•	14 206	•	201.042			
39	Operating Income (Loss)	\$	163,349	\$	23,369	\$	186,718	_\$	14,326	\$	201,043			

References:
Column (A): Company Schedule C-1
Column (B): Schedule JMM-9
Column (C): Column (A) + Column (B)
Column (D): Schedules JMM-17 and JMM-18
Column (E): Column (C) + Column (D)

Arizona Water Company - Oracle Docket No. W-01445A-r1-0310 Test Year ended December 31, 2010

										STRUCTURE	Surreputtal Schedule JMM-9
SUMMARY OF OPERATING INCOME STATEMENT ADJUSTMENTS - TEST YEAR	DJUSTMENTS - TEST )	rear									
	₹	<b>(9)</b>	ō	<u>6</u>	<u> </u>	Ē	į				
LINE ACCT.  NO. NO.  DESCRIPTION	COMPANY AS FILED	Reverse Unbilled Expenses	Fleet Fuel Expense	Removal of Pumping Transmission and Distribution Projection	RUCO Miscellaneous Expense Adjustment	La ToN	(G) Rate Case	Ξ	(I) Income Tax	[v]	[K]
1 <u>OPERATING REVENUES:</u> 2 Residential		Ref: Sch JMM-10	Ref: Sch JMM-11	ADJ #3 Ref: Sch JMM-12	Ref. Sch light 43	ADJ #5	ADJ#6	Not Used ADJ #7	Expense	Expense	LC 5
3 Commercial	156,437		•		St. Coli Statut-13	Ker: Sch JMM-14	Ref. Sch JMM-15	Ref. Sch JMM-16	117	Ref. Sch JMM-18	ADJUSTED
5 Private Fire Service	. 6	•	•		•	٠					801,054
6 Olher Water Revenues	19,841	. ,	•		• •	٠.	•	•			156,437
/ Iotal Water Kevenues 8	\$ 977,615 \$		s		45						283
9 Miscellaneous 10 Total Coereting December	\$ 12,494				•			5	\$	-	19,841
11 Com Operating Nevertues	\$ 990,109 \$		\$								
12 OPERATING EXPENSES.						,		\$	\$	vs vs	12,494
14 Purchased Water	v										
15 Other	5,203	(50)		•		•		,	,	,	,
uden.				•	•	•	•		•	•	•
1/ Purchased Power 18 Purchased Gas	107,154	102	•	•			•	•		•	5,141
	908.08	, (		•	• •	•	•				
20 Water Treatment Expenses	17,008	(88)		(4,859)	•		•	•	•		107,256
22 Customer Accounting Expenses	127,733	(1,374)	(388)		•	•	. ,	•		,	34,330
	103,050	(650)		(12,,,2)	•	•	٠			,	16,903
	147,197	. (514)				, ,		•	, ,		98,251
25 Total Operation and Maintenance Expense 26	\$ 546,739 \$	(2,641)	\$ (697) \$	\$ (72 San e			(4.442)	•			102,236
27 Depreciation and Amortization Expenses	176,809	•	. '		\$ (740)		(4,442)		\$		141,656
Taxes				•	•		•	347	•	•	
	41,571	•									177,156
	9,158	•	• •	•	•			•	٠		
33 Other	39,795	•	•	. ,	•	Ō	•	•	12,423	•	53,994
34 Total Taxes	\$ 103,212 \$					•		•	2,730	2.033	11,894
35 36 Total Operation Expenses	٠	•	•		· ·	\$	5				12,688
37	\$ 826,760 \$	(2,641)	\$ (269)	(32,580) \$	(547) \$				15,159 \$	2,033 \$	120,404
38 Operating Income (Loss)	\$ 163,349 \$	2,641	\$ 269				(4,442) \$	347	\$ 15,159 \$	2,033 \$	803.391

186,718

\$ (15,159) **\$** 

# OPERATING INCOME ADJUSTMENT NO. 1 - REVERSE UNBILLED EXPENSES

			[A]		[B]		[C]
LINE		1	COMPANY		STAFF		STAFF <sup>1</sup>
NO.	DESCRIPTION	1	PROPOSED	A	DJUSTMENTS	RE	COMMENDED
1	Residential	\$	801,054	\$	-	\$	801,054
2	Commercial		156,437		-		156,437
3	Industrial		-		-		<u>'-</u>
4	Revenue Adjustments	\$	957,491	\$	-	\$	957,491
5	•						
6	Source Supply - Other	\$	5,153	\$	-	\$	5,153
7	Unbilled Expenses		50		(50)		-
8	Total Source Supply - Other	\$	5,203	\$	(50)	\$	5,153
9							
10	Purchased Power	\$	107,256	\$	-	\$	107,256
11	Unbilled Expenses		(102)		102		0
12	Total Purchased Power	\$	107,154	\$	102	\$_	107,256
13							
14	Pumping Expense - Other	\$	39,307	\$	-	\$	39,307
15	Unbilled Expenses		88		(88)		•
16	Total Pumping Expense - Other	\$	39,396	\$	(88)	\$	39,307
17	, ,						
18	Water Treatment Expenses	\$	16,940	\$	-	\$	16,940
19	Unbilled Expenses		68		(68)		<u> </u>
20	Total Water Treatment Expenses	\$	17,008	\$	(68)	\$	16,940
21							
22	Transmission and Distribution Expenses	\$	126,360	\$	-	\$	126,360
23	Unbilled Expenses		1,374		(1,374)		
24	Total Transmission and Distribution Expenses	\$	127,733	\$	(1,374)	\$	126,360
25	,						
26	Customer Accounting Expenses	\$	102,400	\$	-	\$	102,400
27	Unbilled Expenses		650		(650)		
28	Total Customer Accounting Expenses	\$	103,050	\$	(650)	\$	102,400
29	• • • • • • • • • • • • • • • • • • • •						
30	Administrative and General Expenses	\$	146,683	\$	-	\$	146,683
31	Unbilled Expenses		514	_	(514)		
32	Total Administrative and General Expenses	\$	147,197	\$_	(514)	\$	146,683
33	•		- /				
34	Total Expense Adjustments	\$	546,739	\$	(2,641)	\$	544,098
54	Total Expenses regions and						

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References: Column (A), Company Schedule C-1 Column (B): Testimony JMM Column (C): Column (A) + Column (B)

#### OPERATING INCOME ADJUSTMENT NO. 3 - FLEET FUEL EXPENSE

	100		. [A]		[B]		[C]
LINE			COMPANY		STAFF		STAFF1
NO.	DESCRIPTION		PROPOSED	/	DJUSTMENTS	R	ECOMMENDED
1	Source Supply - Other	\$	990,051	\$	-	\$	990,051
2	Fleet Fuel Expenses		58		(12)		47
3	Total Source Supply - Other	\$	990,109	\$	(12)	\$	990,097
4							
5	Pumping Expense - Other	\$	38,803	\$	-	\$	38,803
6	Fleet Fuel Expenses		593		(119)		474
7	Total Pumping Expense - Other	\$	39,396	\$	(119)	\$	39,277
8							
9	Water Treatment Expenses	\$	16,824	\$	-	\$	16,824
10	Fleet Fuel Expenses		184		(37)		147
11	Total Water Treatment Expenses	\$	17,008	\$	(37)	\$	16,971
12							
13	Transmission and Distribution Expenses	\$	95,015	\$	~	\$	95,015
14	Fleet Fuel Expenses		32,718		(388)		32,330
15	Total Transmission and Distribution Expenses	\$	127,733	\$	(388)	\$	127,346
16	·						
17	Customer Accounting Expenses	\$	94,231	\$		\$	94,231
18	Fleet Fuel Expenses	•	8,819	•	(104)	•	8,715
19	Total Customer Accounting Expenses	\$	103,050	\$	(104)	\$	102,945
20	Ţ,					<u> </u>	
21	Administrative and General Expenses	\$	147,007	\$	_	\$	147,007
22	Fleet Fuel Expenses	,	189	•	(38)	•	151
23	Total Administrative and General Expenses	\$	147,197	\$	(38)	\$	147,159
24	•						· · · · · · · · · · · · · · · · · · ·
25	Total Expense Adjustments	\$	1,424,492	\$	(697)	\$	1,423,795
26	,	<del></del>		<u> </u>			.,,,,
27	•						
28	Staff's Calculation based on the most recent 12	mont	h gas price of \$ 3.38				
29			, gas p				
30	·		Company Pro-forma	Staf	fs Recalculation		Reduction
31	Source Supply - Other	\$	58	\$		\$	12
32	Pumping Expenses Other	•	593	*	474	•	119
33	Water Treatment Expenses		184		147		37
34	Transmission and Distribution Expenses		1,936		1,548		388
35	Customer Accounting Expenses		522		417		104
36	Administrative and General Expenses		189		151		38
37	Totals	\$	3,482	\$	2,785	\$	697

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

# References:

Column (A), Company Schedule C-1 Column (B): Testimony JMM Column (C): Column (A) + Column (B)

## OPERATING INCOME ADJUSTMENT NO. 3 - REMOVAL OF PROJECTED EXPENSES

		[A]		[B]		[C]
LINE NO.	DESCRIPTION	COMPANY PROPOSED	A	STAFF DJUSTMENTS	RE	STAFF <sup>1</sup> COMMENDED
1	Pumping Expenses - Other	\$ 34,537	\$	-	\$	34,537
2	Normalization of Pumping Expenses	4,859		(4,859)	\$	
3	Total Pumping Expense - Other	\$ 39,396	\$	(4,859)	\$	34,537
4						
5	Transmission and Distribution Expenses	\$ 100,012	\$	-	\$	100,012
6	Normalization of Transmission and Distribution Expenses	 27,721		(27,721)		
7	Total Transmission and Distribution Expenses	\$ 127,733	\$	(27,721)	\$	100,012

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

## References:

Column (A), Company Schedule C-1

Column (B): Testimony JMM

Column (C): Column (A) + Column (B)

## OPERATING INCOME ADJUSTMENT NO. 4 - RUCO MISCELLANEOUS EXPENSE ADJUSTMENT

		[A]		(B)		[C]
LINE		COMPANY		STAFF	T	STAFF <sup>1</sup>
NO.	DESCRIPTION	PROPOSED	L.	ADJUSTMENTS	1	RECOMMENDED
1	Administrative and General Expenses	\$ 2,090,357	\$	(547)	\$	2,089,810

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References:
Column (A), Company Schedule C-1
Column (B): Testimony JMM
Column (C): Column (A) + Column (B)

Surrebuttal Schedule JMM-14

Arizona Water Company - Oracle Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

OPERATING INCOME ADJUSTMENT NO. 5 - NOT USED

# OPERATING INCOME ADJUSTMENT NO. 6 - RATE CASE EXPENSE

	Г		]~	ıg	14
<u>5</u>	STAFF1	RECOMMENDED	140 572	2 183	142,754
	L	œ	S		8
[8]	STAFF	ADJUSTMENTS		(4,442)	(4,442)
			s		တ
[A]	COMPANY	PROPOSED	140,572	6,625	147,197
		4	49		₩
		DESCRIPTION	Administrative and General Expenses	Rate Case Expense Pro Forma	Total Administrative and General
	LINE	ė.	-	7	က

Staff's Calculation of Rate Case Expense for Pinal Valley

	orall a calculation of Rate Case Expense for Pinal Va	ror Pinal Valley						
				[ <del>V</del> ]	[8]	(0)	(a)	(E)
Line	System		Average Number of <u>Customers</u>	T.Y. 2010 Rate Case Expense Estimate /	Normalization Period <u>in Years</u>	Annual Amortization / Pro Forma Rate Case Exp.	T.Y. 2010 Prior Rate Case Expense Charged to O&M - 928.2	Increase / ( <u>Decrease)</u>
. 72 %	All Systems							
o 4		Pinal Valley White Tank	28,030	206,277.86 14,177.38	ოო			
S.		Ajo	629	4,997.47	ო			
တ		Superstition	23,792	175,085.54	ო			
7		Cochise	6,404	47,130.98	m			
ω .		San Manuel	1,476	10,860.25	m			
o :		Oracle	1,521	11,189.57	ო	3 730	1 547 €	
9		SaddleBrooke Ranch	68	651.28	ო			2,183
=		Winkelman	157	1,152.32	ო			
12		Navajo	060'6	66,897.02	m			
. 13		Verde Valley	10,569	77,779.34	m			
4 5			83,733	616,199				,
16	Rate Case Expense Incurred Last Time		S.	616,199				
<u> </u>	Company Proposed Rate Case Expense Pro Forma	Pro Forma					€7	6.625
9 0	Staff Adjustment to Date Contraction							1
3	Orall Adjustification Nate Case Experse						εs	(4,442)

<sup>1</sup> Amounts do not reflect other adjustments.

References: Column (A), Company Schedule C-1 Column (B): Testimony JMM Column (C): Column (A) + Column (B)

#### OPERATING INCOME ADJUSTMENT NO. 7 - NOT USED

			[A]			[B]		[C]	[D]	 [E]
Ì			PLANT			onDepreciable		DEPRECIABLE		RECIATION
LINE	ACCT		SERVI		01	Fully Depreciated		PLANT	DEPRECIATION	EXPENSE
NO.	NO.	DESCRIPTION	Per Sta		1	PLANT		(Col A - Col B)	RATE	I C x Col D)
1	301	Organization Cost	\$	13	\$			13	0.00%	-
2	302	Franchise Cost	\$	-	\$			\$-	4.00%	-
3	303	Other Intangibles	\$	591	\$			591	5.07%	30
4		Water Rights		9,139				129,139	0.00%	-
5	310.3	Other Source of Supply Land	\$ 2	1,695	\$			24,695	0.00%	-
6	310.4	Wells - Other	\$	-	\$			\$ -	2.50%	-
7	314			),265				480,265	3.13%	15,032
8	320	Pumping Plant Land		2,742				2,742	0.00%	\$ -
9	321	· · · · · · · · · · · · · · · · · · ·		,283			- 5		2.86%	2,611
10	325	Electric Pumping Equipment	\$ 88	3,754	\$		- 5		5.88%	\$ 52,259
11	328	Gas Engine Equipment	\$	-	\$		- \$		4.00%	\$ -
12	330		\$	-	\$		- 5		0.00%	•
13	331	Water Treatment Structures and Improvements		,054			- 9		2.50%	\$ 876
14	332	Water Treatment Equipment	\$ 7	,579	\$		- \$		2.86%	\$ 2,047
15	340	Transmission and Distribution - Land		9,680			- \$	19,680	0.00%	\$ -
16	342	Storage Tanks		,126			- 5		2.00%	6,123
17	343	Transmission and Distribution Mains	\$ 3,992	,029	\$		- \$	3,992,029	1.79%	\$ 71,457
18	344	Fire Sprinkler Taps	\$	•	\$		- 5	-	2.00%	\$ ~
19	345	Services		,363			- \$		2.38%	16,288
20	346	Meters	\$ 112	2,379	\$		. \$		4.55%	\$ 5,113
21	348	Hydrants	\$ 158	,971	\$	,	. \$		1.82%	2,893
22	389	General Plant Land	\$	-	\$		- \$		0.00%	\$ -
23	390	General Plant Structures		',431			. \$		2.50%	\$ 3,686
24	390.1			,479	\$		. \$		1.74%	547
25	391	Office Furniture & Equipment		,350	\$		. \$		6.67%	\$ 6,893
26	393	Warehouse Equipment		,991	\$		. \$		5.00%	\$ 100
27	394	Tools, Shops, and Garage Equipment	\$ 29	,164	\$		٠ \$		4.00%	\$ 1,167
28	395	Laboratory Equipment	\$	238	\$		. \$		5.00%	\$ 12
29	396	Power Operated Equipment		,161			. \$		6.67%	\$ 77
30	397	Communications Equipment		,511			٠ \$		6.67%	\$ 9,906
31	398	Miscellaneous Equipment	\$ 4	,845	\$		٠ \$	4,845	3.33%	\$ 161
32		Intentionally Left Blank								 
33		Total Plant	\$ 7,465	,833	\$		. \$	7,465,820		\$ 197,278
34										
35		Composite Depreciation Rate (Depr Exp / Depreciable Plant):		2.00%						
36		CIAC: _								
37		Amortization of CIAC (Line 35 x Line 36):	\$ 20	,123						
38										
39		Depreciation Expense Before Amortization of CIAC:		,278						
40		Less Amortization of CIAC: _		,123	_					
41		Test Year Depreciation Expense - Staff:		,156						
42		Depreciation Expense - Company: _		,809						
43		Staff's Total Adjustment:	\$	347						

References:
Column [A]: Schedule JMM-4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

#### OPERATING INCOME ADJUSTMENT NO. 8 - TEST YEAR INCOME TAXES

LINE NO.		1	COMPANY PROPOSED	STAFF ADJUSTMENTS	STAFF RECOMMENDED
1	Federal Income Taxes	\$	41,571	\$ 12,423	\$ 53,994
2	State Income Taxes		9,158	 2,736	11,894
3	Federal and State Income Taxes	\$	50,729	\$ 15,159	\$ 65,888

References:
Column (A), Company Schedule C-1
Column (B): Column [C] - Column [A]
Column (C): Schedule JMM-2

# OPERATING INCOME ADJUSTMENT NO. 9 - PROPERTY TAX EXPENSE

			[A]		[B]
LINE			STAFF		STAFF
NO.	Property Tax Calculation	AS	ADJUSTED	REC	OMMENDED
			_		
1	Staff Adjusted Test Year Revenues	\$	990,109	\$	990,109
2	Weight Factor		2		2
3	Subtotal (Line 1 * Line 2)		1,980,218	\$	1,980,218
4	Staff Recommended Revenue, Per Schedule JMM-1		990,109	\$	1,013,773
5	Subtotal (Line 4 + Line 5)		2,970,327		2,993,991
6	Number of Years		3		3
7	Three Year Average (Line 5 / Line 6)		990,109	\$	997,997
8	Department of Revenue Mutilplier		2		2
9	Revenue Base Value (Line 7 * Line 8)		1,980,218	\$	1,995,994
10	Plus: 10% of CWIP -		-		-
11	Less: Net Book Value of Licensed Vehicles		-	\$	- '
12	Full Cash Value (Line 9 + Line 10 - Line 11)		1,980,218	\$	1,995,994
13	Assessment Ratio		20.5%		20.5%
14	Assessment Value (Line 12 * Line 13)		405,945	\$	409,179
15	Composite Property Tax Rate (Per Company Schedule)		10.3038%		10.3038%
16					
17	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$	41,828		
18	Company Proposed Property Tax		39,795		
19					
20	Staff Test Year Adjustment (Line 17-Line 18)	\$	2,033		
21	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)			\$	42,161
22	Staff Test Year Adjusted Property Tax Expense (Line 17)			\$	41,828
23	Increase in Property Tax Expense Due to Increase in Revenue Requirement			\$	333
24				-	
25	Increase to Property Tax Expense			\$	333
26	Increase in Revenue Requirement			•	23,664
27	Increase to Property Tax per Dollar Increase in Revenue (Line25/Line 26)				1.408191%
			*		

# **Arizona Water Company Cost of Capital Calculation**

Capital Structure
And Weighted Average Cost of Capital
Staff Recommended and Company Proposed

Description	Weight (%)	Cost	Weighted <u>Cost</u>
		<del>mina di pris</del>	
Staff Recommended Str	ucture		
Debt	49.0%	6.8%	3.3%
Common Equity	51.0%	9.4%	<u>4.8%</u>
Weighted Average Cost	of Capital		8.1%
Company Proposed Stru	ecture <sup>1</sup>		
Debt	49.0%	6.8%	3.3%
Common Equity	51.0%	12.5%	<u>6.4%</u>
Weighted Average Cost	of Capital		9.7%

<sup>&</sup>lt;sup>1</sup> Company Schedule D-1, page 2

[D]: [B] x [C]

SURREBUTTAL TESTIMONY OF Jeffrey M. Michlik

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#### Surrebuttal Schedule JMM-1

# REVENUE REQUIREMENT

LINE NO.	DESCRIPTION	C	(A) COMPANY FAIR <u>VALUE</u>	(B) STAFF FAIR <u>VALUE</u>
1	Adjusted Rate Base	\$	(124,601)	\$ (114,868)
2	Adjusted Operating Income (Loss)	\$	(78,989)	\$ (76,631)
3	Current Rate of Return (L2 / L1)		NMF	NMF
4	Required Rate of Return		NMF	NMF
5	Required Operating Income (L4 * L1)	\$	(12,108)	\$ -
6	Operating Income Deficiency (L5 - L2)	\$	66,880	\$ 76,631
7	Gross Revenue Conversion Factor		1.6535	1.6519
8	Required Revenue Increase (L7 * L6)	\$	110,584	\$ 126,586
9	Adjusted Test Year Revenue	\$	117,103	\$ 117,103
10	Proposed Annual Revenue (L8 + L9)	\$	227,687	\$ 243,689
11	Required Increase in Revenue (%)		94.43%	108.10%

NMF - Not Meaningful due to negative rate base.

## References:

Column (A): Company Schedule A-1

Column (B): Staff Schedules JMM-3 and JMM-7

#### GROSS REVENUE CONVERSION FACTOR

LINE	DESCRIPTION	(A)	(B)	(C)	(D)
	Calculation of Gross Revenue Conversion Factor: Revenue Uncollecible Factor (Line 11) Revenues (L1 - L2) Combined Federal and State Income Tax and Property Tax Rate (Line 23) Subtotal (L3 - L4) Revenue Conversion Factor (L1 / L5)	100.0000% 0.0000% 100.0000% 39.4635% 60.5365% 1.651897			
8 9 10	Calculation of Uncollecttible Factor: Unity Combined Federal and State Tax Rate (Line 23) One Minus Combined Income Tax Rate (L7 - L8) Uncollectible Rate Uncollectible Factor (L9 * L10)	100.0000% 38.5989% 61.4011% 0.0000% 0.0000%			
13 14 15 16	Calculation of Effective Tax Rate: Operating Income Before Taxes (Arizona Taxable Income) Arizona State Income Tax Rate Federal Taxable Income (L12 - L13) Applicable Federal Income Tax Rate (Line 55) Effective Federal Income Tax Rate (L14 x L15) Combined Federal and State Income Tax Rate (L13 +L16)	100.0000% 6.9680% 93.0320% 34.0000% 31.6309%	38.5989%		
19 20 21 22	Calculation of Effective Property Tax Factor Unity Combined Federal and State Income Tax Rate (L17) One Minus Combined Income Tax Rate (L18-L19) Property Tax Factor (JMM-17, L27) Effective Property Tax Factor (L20*L21) Combined Federal and State Income Tax and Property Tax Rate (L17+L22)	100.0000% 38.5989% 61.4011% 1.4082%	0.8646%	39.4635%	
24 25 26		\$ - (76,631) \$	76,631	,	
28 29 30 31	Income Taxes on Test Year Revenue (Col. [B], L52) Required Increase in Revenue to Provide for Income Taxes (L27 - L28)  Recommended Revenue Requirement (Schedule JMM-1, Line 10) Uncollectible Rate (Line 10) Uncollectible Expense on Recommended Revenue (L30*L31)	\$ 243,689 0.0000% \$ -	48,173		
33 34 35 36	Adjusted Test Year Uncollectible Expense Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)  Property Tax with Recommended Revenue (JMM-17, Col B, L31) Property Tax on Test Year Revenue (JMM-17, Col A, L17) Increase in Property Tax Due to Increase in Revenue (L35-L36)	\$ - \$ 6,730 4,947	1,783		•
38	Total Required Increase in Revenue (L26 + L29 + L34 + L37)	_ <u>\$</u> Test Year		Staff Recommended	
40 41	Calculation of Income Tax:  Revenue (Schedule JMM-7, Col. [C], Line 5 & Sch. JMM-1, Col. [D] Line 10)  Operating Expenses (L56)  Synchronized Interest (L56)  Arizona Taxable Income (L39 - L40 - L41)	\$ 117,103 \$ 241,907 \$ - \$ (124,804)	126,586	243,689 3 243,689 5 -	
43 44 45	Arizona State Income Tax Rate Arizona Income Tax (L42 x L43) Federal Taxable Income (L42 - L44) Federal Tax on First Income Bracket (\$1 - \$50,000) @ 34%	6.9680% \$ (8,696) \$ (116,108) \$ (17,000)	<u></u> !	6.9680% 5 - 5 -	
47 48 49 50 51	Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 34% Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 34% Federal Tax on Fifth Income Bracket (\$335,001 -\$10,000,000) @ 34% Total Federal Income Tax Combined Federal and State Income Tax (L44 + L51)	\$ (8,500) \$ (8,500) \$ (5,477) \$ - \$ (39,477) \$ (48,173)		\$ - \$ - \$ - \$ - \$ -	
	Applicable Federal Income Tax Rate [Col. [E], L51 - Col. [B], L51] / [Col. [E], L45	- Col. [B], L45]	_	34.0000%	
55	Calculation of Interest Synchronization: Rate Base (Schedule JMM-3, Col. (C), Line 17 Weighted Average Cost of Debt Synchronized Interest (L45 X L46)	\$ (114,868) 0.0% \$ -			

## **RATE BASE - ORIGINAL COST**

LINE NO.	<u>.</u>	(	(A) COMPANY AS FILED	(B) TAFF STMENTS	Adj. <u>No.</u>	Ė	(C) STAFF AS ADJUSTED
1 2 3	Plant in Service Less: Accumulated Depreciation Net Plant in Service	\$ \$	3,686,215 242,563 3,443,653	\$  9,532 149 9,383	2	\$ 	3,695,747 242,712 3,453,036
4 5 6	<u>LESS:</u>						
7 8 9 10	Contributions in Aid of Construction (CIAC) Less: Accumulated Amortization Net CIAC	<b>\$</b> ——	226,219 5,049 221,170	\$ <u>-</u> -		\$ - \$	226,219 5,049 221,170
11 12	Advances in Aid of Construction (AIAC)		3,312,883	-			3,312,883
13 14	Customer Deposits		706	-			706
15 16 17	Deferred Income Tax Credits		38,052	-			38,052
18 19 20	ADD:						
21 22	Working Capital		4,557	350	3		4,907
23 24 25	Deferred Regulatory Assets		-	-			-
26	Original Cost Rate Base	\$	(124,601)	\$ 9,733		\$	(114,868)

# References:

Column [A]: Company as Filed Column [B]: Schedule JMM-4

Column (C): Column (A) + Column (B)

Arizona Water Company - SaddleBrooke Ranch Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

<b>[E]</b>	STAFF <u>ADJUSTED</u>		*	- ,	13	0	. 25	•	466,816		23,663		ı		e0	1		2,312,756	15,243	208,294	5 53,814	871.001	161	2.315	7,359	19	399	~ (	27 07 07 07 07 07 07 07 07 07 07 07 07 07	21,940	- ,	3,695,747		\$ 3,095,747	242,712		\$ 3,453,036		\$ 226,219	5,049	221,170	706	38,052			4,907	. •	(114 868)	
[0]	ADJ #3	Cash Working Capital	Ref: Sch JMM-7	9 45 1 1	•	,	1	·		,		• <del>6</del>		1	'	,		,				,	, ,	, ,		,	•	•	•					1					•		•	. 1	,			350	•	350	
<u>ত</u>	ADJ #2	Capitalize Water Testing Expense		· ·	. •	1	1	•	9,510	•	•	;	: I		•		ı		•	1	•	•			•	,	•	•	•					\$ 9,510	149	,	\$ 9,361		· •	1	•	•	. ,	-		•	•	0 361	
[8]	ADJ#1	RUCO Adjustment	Ref: Sch JMM-5	ι <del>6</del>	•		1	•	ı	•	•	ı			. 1	•		•	•	•	•						(38)	•	•	09			1	\$ 22	4	•	\$ 22		1 <del>69</del>									ı	A
Ē	2	COMPANY	AS FILED	\$	, 5	2 -	52	•	457,306	•	53,685	416,672		•	,	•	•	2,312,756	15,243	208,294	53,814	136,178		161	2,315	600,1	437	7	2	21,887	7	20000	5,000,6	\$ 3,686,215	242 563	- 12,000	\$ 3,443,653		\$ 226.219		221,170	3,312,883	38.062	260,06			4,557		\$ (124,601)
	Ŀ	1	ERVICE: DESCRIPTION	Organization Cost	Franchise Cost		1 Water Rights 2 Other Source of Supply Land		4 Wells - Other					Water Treatment Plant - Land				Transmission and Distribution Mains						_			3 Warenouse Equipment 4 Tools Shops and Garage Equipment					Intentionally Left Blank		Total Plant in Service		Less: Accumulated Depreciation	Net Plant in Service	ć	S	Continuations in Ald of Collegiation Less: Accumulated Amortization	Net CIAC (L25 - L26)	Advances in Aid of Construction (AIAC)	Customer Deposits	Deferred Income Taxes		Ö	Working Capital Deferred Bernlatory Assets		Original Cost Rate Base
	LINE ACCT.		PLANT IN SERVICE.	2 301	3 302			510.5	7 310.4		_						16 340								.,		27 393				32 398	33	34	•			39 40 Net			24 24 24					50		52 Wor		55 <b>Ori</b> ç

## RATE BASE ADJUSTMENT NO. 1 - RUCO RATE BASE ADJUSTMENT

_					[A]	 [B]	 [C]
	LINE NO.	ACCT NO.	DESCRIPTION		OMPANY ROPOSED	 TAFF STMENTS	STAFF OMMENDED
	1	Phoenix	Meter Shop				
	2	394	Tools, Shops, and Garage Equipment	\$	437	\$ (38)	\$ 399
	3	397	Communications Equipment		21,887	60	21,948
	4			\$	22,325	\$ 22	\$ 22,347
	5			2			

#### REFERENCES:

Column [A]: Company Filing Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

## RATE BASE ADJUSTMENT NO. 1 - CAPITALIZE WATER TESTING EXPENSE

				[A]		[B]	[C]
LINE NO.	ACCT NO.	DESCRIPTION	i .	OMPANY ROPOSED	1 -	STAFF STMENTS	STAFF OMMENDED
1	314	Wells	\$	457,306	\$	9,510	\$ 466,816
2							
3		Accumulated Depreciation		242,563	\$	149	 242,712
4							

## REFERENCES:

Column [A]: Company Filing
Column [B]: Direct Testimony JMM
Column [C]: Column [A] + Column [B]

#### RATE BASE ADJUSTMENT NO. 3 - CASH WORKING CAPITAL

				[A]	[B]	[C]	[D]	(E)		[F]
LINE	ACCT			COMPANY	STAFF	STAFF	1	• •		• •
NO.	NO.	DESCRIPTION		PROPOSED	ADJUSTMENTS	RECOMMENDED	j			
1		Working Capital	<u>\$</u>	4,557	\$ 350	\$ 4,907	_			
2										
3										
4										
5				Test Year			Net	Lead / Lag		king Cash
6				Adjusted	Revenue	Expense	Lag Days	Factor		uirement
7	0			Results			[B - C]	[D + 365]	L	<u> </u>
8	Staff's Ca									
9	Purchase	d Power	\$	103,754	28.62	30.87	(2.25)	(0.0062)	\$	(641)
10 11	Payroll Purchase	4 184-4		10,235	28.62	14.00	14.62	0.0400		410
12	Chemical			-	28.62 28.62	26.04	2.58	0.0071		-
13		s & Liability Insurance		831	28.62 28.62	(18.11)	46.73	0.1280		-
14		's Compensation insurance		190	28.62 28.62	(45.27)	73.89	0.2024		168
15	Health Ins			1,338	28.62 28.62	(46.50)	75.12 37.54	0.2058		39
16		M (Excluding Rate Case Expense)		28,596	28.62	(8.92)	37.54 37.89	0.1028		138
17		ione Taxes		26,390	28.62 28.62	(9.27) 37.00	(8.38)	0.1038		2,968
18		ome Taxes		-	28.62	37.00 37.00		(0.0230)		•
19	FICA Tax			772	28.62	14.00	(8.38) 14.62	(0.0230) 0.0400		-
20		SUTA Taxes		25	28.62	83,10	(54.48)			31
21	Property			7,045	28.62	212.00	(183.38)	(0.1493) (0.5024)		(4)
22		on, Svc. Contracts, & Misc. Fees		817	28.62	(98.83)	127.45	0.3492		(3,540) 285
23		nt Annuities (401k)		686	28.62	34.72	(6.10)	(0.0167)		(11)
24		a ramado (romy		000	20.02	04.12	(0.10)	(0.0107)		(11)
25										
26			\$	154,290			·		\$	(157)
27	٤	Subtotal	•	,					Ψ	(131)
28										
29	Interest E:	pense		(4,169)	28.62	91.25	(62.63)	(0.1716)		715
30	Cost of Ed	uity		-		•	-	(0.77,0)		-
31										
32	5	Subtotal	\$	(4,169)					\$	715
33				,					•	
34										
35	T	otal		150,121		****			\$	559
36			<del></del>							
37	Company	Cash Working Capital							\$	209
38									•	
39	Increase/(	Decrease)						-	\$	350

REFERENCES:
Column [A]: Company Filing
Column [B]: Direct Testimony JMM
Column [C]: Column [A] + Column [B]

# OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND STAFF RECOMMENDED

		C	[A] YNAPMC		(B)		[C] STAFF		[D]		[E]
		-	JUSTED	s	TAFF		ST YEAR	;	STAFF		
LINE		TE	ST YEAR	TES	TYEAR		AS		OPOSED		STAFF
<u>NO.</u>	DESCRIPTION	<u>A</u>	S FILED	ADJU	<u>STMENTS</u>	<u>AC</u>	JUSTED	CI	HANGES	REC	OMMENDED
1	OPERATING REVENUES:										
2	Residential	\$	45,127	\$	-	\$	45,127	\$	126,586	\$	171,713
3	Commercial		61,277		-		61,277		-		61,277
4	Industrial		-		-		-		-		-
5	Private Fire Service		85				85				85
6	Other Water Revenues		9,032		-		9,032				9,032
7	Total Water Revenues	\$	115,521	\$	-	\$	115,521	\$	126,586	\$	242,107
8	•										
9	Miscellaneous		1,582.00				1,582.00				1,582
10	Total Operating Revenues	_\$	117,103	\$		\$	117,103	\$	126,586	\$	243,689
11											
12	OPERATING EXPENSES:										
13	Source of Supply Expenses	•		•		•		\$		\$	
14	Purchased Water	\$	-	\$	- (0)	\$	246	Ф	-	Ф	246
15	Other		246		(0)		240		-		246
16	Pumping Expenses		103,754				103,754		_		103,754
17	Purchased Power Purchased Gas		103,754		-		103,734		_		100,104
18 19	Other		17,703		311		18,014		_		18,014
20	Water Treatment Expenses		753		(3)		750		_		750
21	Transmission and Distribution Expenses		7,190		(1,199)		5,991		-		5,991
22	Customer Accounting Expenses		8,102		(1,100)		8,087		_		8,087
23	Sales Expense		-		-		-		-		-,,
24	Administrative and General Expenses		10,107		(284)		9.823		-		9,823
25	Total Operation and Maintenance Expense		147,855		(1,190)		146,665			-	146,665
26	Total opolation and maintenance Expense		, ,		(.,,						
27	Depreciation and Amortization Expenses		89,428		300		89,728				89,728
28			·								
29	Taxes										
30	Federal Income Taxes		(38,543)		(934)		(39,477)		39,477		•
31	State Income Taxes		(8,491)		(205)		(8,696)		8,696		-
32	Property Taxes		5,275		(328)		4,947		1,783		6,730
33	Other		567				567				567
34	Total Taxes		(41,192)		(1,467)		(42,659)		49,955		7,297
35			-		-		-		•		-
36			-								
37	Total Operating Expenses		196,091		-		193,734		49,955		243,689
38			(70.000)	•	0.050		(70.004)	•	70.004	•	
39	Operating Income (Loss)	\$	(78,989)	<u>\$</u>	2,358	\$	(76,631)	\$	76,631	\$	

References:
Column (A): Company Schedule C-1
Column (B): Schedule JMM-9
Column (C): Column (A) + Column (B)
Column (D): Schedules JMM-17 and JMM-18
Column (E): Column (C) + Column (D)

SUMMARY OF OPERATING INCOME STATEMENT ADJUSTMENTS - TEST YEAR

[k] STAFF  ADJUSTED  M-17	•	85 9,032 - \$ 115,521	\$ 1,582	·	246	103,754	18,014	5,991 8,087	9,823	89,728		(328) 4,947 567 (328) \$ (42,659)
(I) (J) Income Tax Property Expense Expense ADJ #8	,		\$	•				• • •	5		(934)	(1,139) \$ (32
[H] Depreciation Incon Expense Exp AQU #7 Ref. Sch JMM-15   Ref. Sch	es	<b>.</b>	\$	•		•			5	300	, ,	<b>S</b>
(G) Rate Case Expense ADJ #6 Ref. Sch JMM-14 Ref			\$	<b>69</b>	,	. ,			(204) \$			3 (POC)
[F]  Not Used  ADJ #5  Ref. Sch JMM-13   R	• • •	,	\$	,					-			
(E) RUCO Miscellaneous Expense Adjustment ADJ #4 Ref. Sch JMM-12	, ,				•			(42)	(42) \$	,		(42) \$
(D) Removal of Pumping Transmission and Distribution Projection ADU#3 Ref. Sch JMM-11	* 1 1					301	(1,150)		(849) \$	,		(849) \$
[C] Fleet Fuel Trans. Expense ADU#2 Ref. Sch JMM-10		•		ຸຣ	,	(6)	£ (5)	6 . 6	<b>4</b> (16)			(51) \$
(B)  Reverse Unbilled  Expenses  ADJ #1  Ref. Sch JMM-9  \$				, 0		. 82 '	9 (2) 6	(35)	,			(44) \$
(A)  COMPANY  AS.FILED  \$ 45,127 \$ 61,277 \$	85 9,032 \$ 115,521 \$	11	v	246	103,754	17,703	7,190 8,102	10,107	89,428	(38,543)	5,275 5,275 567 \$ (41,192) \$	\$ 196,091 \$
DESCRIPTION ES:	rvice evenues	s s	(전) 1848		er	202	bution Expenses (penses	rral Expenses tenance Expense	ation Expenses	Taxes		
LINE ACCT.  NO. NO.  1 OPERATING REVENUES: 2 Residential 3 Commercial 4 Industrial	Private Fire Service Other Water Revenues Total Water Revenues	Miscellaneous Total Operating Revenues	OPERATING EXPENSES: Source of Supply Expenses Purchased Water	Other Pumping Expenses	Purchased Power	Other Water Treatment Expenses	Itansmission and Distribution Expenses Customer Accounting Expenses Sales Expense	Administrative and General Expenses Total Operation and Maintenance Expense	Depreciation and Amortization Expenses	Taxes Federal Income Taxes State Income Taxes	Property Taxes Other Total Taxes	35 Total Operating Expenses 37 38 Operating Income (Loss)

#### OPERATING INCOME ADJUSTMENT NO. 1 - REVERSE UNBILLED EXPENSES

		 [A]		[B]		[C]
LINE		COMPANY		STAFF		STAFF1
NO.	DESCRIPTION	PROPOSED	A	ADJUSTMENTS	RE	COMMENDED
1	Residential	\$ 45,127	\$	-	\$	45,127
2	Commercial	61,277		-		61,277
3	Industrial	 -				
4	Revenue Adjustments	\$ 106,404	\$	-	\$	106,404
5						
6	Source Supply - Other	\$ 246	\$	-	\$	246
7	Unbilled Expenses	 . (0)		0		
8	Total Source Supply - Other	\$ 246	\$	0	\$	246
9						
10	Purchased Power	\$ 103,754	\$	-	\$	103,754
11	Unbilled Expenses	 		-		
12	Total Purchased Power	\$ 103,754	\$	-	\$	103,754
13						
14	Pumping Expense - Other	\$ 17,721	\$	-	\$	17,721
15	Unbilled Expenses	(18)		18		-
16	Total Pumping Expense - Other	\$ 17,703	\$	18	\$	17,721
17						
18	Water Treatment Expenses	\$ 753	\$	-	\$	753
19	Unbilled Expenses	(0)		0		(0)
20	Total Water Treatment Expenses	\$ 753	\$	0	\$	753
21						
22	Transmission and Distribution Expenses	\$ 7,170	\$	-	\$	7,170
23	Unbilled Expenses	20		(20)		· -
24	Total Transmission and Distribution Expenses	\$ 7,190	\$	(20)	\$	7,170
25						
26	Customer Accounting Expenses	\$ 8,094	\$	-	\$	8,094
27	Unbilled Expenses	8		(8)		
28	Total Customer Accounting Expenses	\$ 8,102	\$	(8)	\$	8,094
29						
30	Administrative and General Expenses	\$ . 10,072	\$	-	\$	10,072
31	Unbilled Expenses	35		(35)		-
32	Total Administrative and General Expenses	\$ 10,107	\$	(35)	\$	10,072
33	·					
34	Total Expense Adjustments	\$ 147,855	\$	(44)	\$	147,811
	• •				-	

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References:
Column (A), Company Schedule C-1
Column (B): Testimony JMM
Column (C): Column (A) + Column (B)

## OPERATING INCOME ADJUSTMENT NO. 2 - FLEET FUEL EXPENSE

			[A]		[B]		[C]
LINE			COMPANY		STAFF		STAFF <sup>1</sup>
NO.	DESCRIPTION		PROPOSED	A	DJUSTMENTS	R	ECOMMENDED
1	Source Supply - Other	\$	117,099	\$	-	\$	117,099
2	Fleet Fuel Expenses		4		(1)		3
3	Total Source Supply - Other	\$	117,103	\$	(1)	\$	117,102
4							
5	Pumping Expense - Other	\$	17,659	\$	-	\$	17,659
6	Fleet Fuel Expenses		44		(9)		35
7	Total Pumping Expense - Other	\$	17,703	\$		\$	17,694
8							
9	Water Treatment Expenses	\$	739	\$		\$	739
10	Fleet Fuel Expenses		14		(3)		11
11	Total Water Treatment Expenses	\$	753	\$	(3)	\$	750
12							
13	Transmission and Distribution Expenses	\$	(25,528)	\$	-	\$	(25,528)
14	Fleet Fuel Expenses		32,718	·	(29)	•	32,689
15	Total Transmission and Distribution Expenses	\$	7,190	\$	(29)	\$	7,161
16	·				<del></del>		
17	Customer Accounting Expenses	\$	(717)	\$	_	\$	(717)
18	Fleet Fuel Expenses	•	8,819	Τ.	(8)	•	8,811
19	Total Customer Accounting Expenses	\$	8,102	\$	(8)	\$	8,094
20	• ,					<u> </u>	
21	Administrative and General Expenses	\$	10.093	\$	-	\$	10,093
22	Fleet Fuel Expenses	•	14	*	(3)	•	11
23	Total Administrative and General Expenses	\$		\$	(3)	\$	10,104
24	·				<del></del>	<u> </u>	
25	Total Expense Adjustments	-\$	160,958	\$	(51)	\$	160,907
26		<u> </u>		<u> </u>	(0.1/	<del>-</del>	
27							
28	Staff's Calculation based on the most recent 12	mont	h gas price of \$ 3.31				
29	Otalio Galoulation badda dir tilo illioti fotolit 12	11,0110	gao pinos o. v o.o.				
30			Company Pro-forma	Staf	ff's Recalculation		Reduction
31	Source Supply - Other	\$	4	\$		\$	1
32	Pumping Expenses Other	•	44	*	35	*	9
33	Water Treatment Expenses		14		11		3
34	Transmission and Distribution Expenses		142		114		29
35	Customer Accounting Expenses		38		31		8
36	Administrative and General Expenses		14		11		3
37	Totals	\$	256	\$		\$	51

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References:
Column (A), Company Schedule C-1
Column (B): Testimony JMM
Column (C): Column (A) + Column (B)

## OPERATING INCOME ADJUSTMENT NO. 3 - REMOVAL OF PROJECTED EXPENSES

		[A]		[B]		[C]
LINE NO.	DESCRIPTION	COMPANY PROPOSED	,	STAFF ADJUSTMENTS	RE	STAFF <sup>1</sup> COMMENDED
1	Pumping Expenses - Other	\$ 18,004	\$	-	\$	18,004
2	Normalization of Pumping Expenses	 (301)		301	\$	
3	Total Pumping Expense - Other	\$ 17,703	\$	301	\$	18,004
4						
5	Transmission and Distribution Expenses	\$ 6,040	\$	-	\$	6,040
6	Normalization of Transmission and Distribution Expenses	 1,150		(1,150)		
7	Total Transmission and Distribution Expenses	\$ 7,190	\$	(1,150)	\$	6,040

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

## References:

Column (A), Company Schedule C-1 Column (B): Testimony JMM

Column (C): Column (A) + Column (B)

# OPERATING INCOME ADJUSTMENT NO. 4 - RUCO MISCELLANEOUS EXPENSE ADJUSTMENT

LINE COMPANY NO DESCRIPTION PROPOSED	STAFF	STAFF <sup>1</sup>
NO. DESCRIPTION PROPOSED	ADJUSTMENTS	RECOMMENDED
1 Administrative and General Expenses \$ 10,107	\$ (42)	\$ 10,065

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References:
Column (A), Company Schedule C-1
Column (B): Testimony JMM
Column (C): Column (A) + Column (B)

Surrebuttal Schedule JMM-14

Arizona Water Company - SaddleBrooke Ranch Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

OPERATING INCOME ADJUSTMENT NO. 5 - NOT USED

Arizona Water Company - SaddleBrooke Ranch Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

OPERATING INCOME ADJUSTMENT NO. 6 - RATE CASE EXPENSE

2	STAFF1	\$ 9,707	\$ 9,903
[8]	STAFF	\$ (204)	\$ (204)
A	COMPANY	\$ 9,707	\$ 10,107
	NO. DESCRIPTION	2 Rate Case Expense Pro Forma	of I ofal Administrative and General

Staff's Calculation of Rate Case Expense for Pinal Valley

E	Increase / (Decrease)	196	400	
[0]	T.Y. 2010 Prior Rate Case Expense Charged to O&M - 928.2	2 \$	€9	•
[0]	Annual Amortization / Pro Forma <u>Rate Case Exp.</u>	\$ 217		
<u>@</u>	Normalization Period in <u>Years</u>	<b>ღოოთოოოოო</b>		
[A]	T.Y. 2010 Rate Case Expense Estimate / Spread	206,277.86 14,177.38 4,977.38 175,085.54 47,130.98 10,860.25 11,189.57 651.28 1,152.32 66,897.02 77,779.34 616,199		
	Average Number of <u>Customers</u>	28,030 1,927 679 23,792 6,404 1,521 1,521 89 157 9,090 10,569 83,733		
		Pinal Valley White Tank Ajo Superstition Cochise San Manuel Oracle SaddleBrooke Ranch Winkelman Navajo Verde Valley		
		Pinal Val White Ta Ajo Superstit Cochise San Man Oracle SaddleBr Winkelm Navajo Verde Va Company Proposed Rate Case Expense Pro Forma	Staff Adjustment to Rate Case Expense	
	System All Systems	Rate Case E Company Pn	Staff Adjustn	
	Line 1 Vo.	8 4 4 9 9 8 8 8 8 9 7 17 17 17 17 18 18 18 18 18 18 18 18 18 18 18 18 18	20 <del>-</del> 3	

<sup>1</sup> Amounts do not reflect other adjustments.

References: Column (A), Company Schedule C-1 Column (B): Testimony JMM Column (C): Column (A) + Column (B)

#### OPERATING INCOME ADJUSTMENT NO. 7 - DEPRECIATION EXPENSE

				[A]		[B]	[C]	[0]		[E]
				LANT In		NonDepreciable	DEPRECIABLE			EPRECIATION
LINE	ACCT		S	ERVICE		or Fully Depreciated	PLANT	DEPRECIATION		EXPENSE
NO.	NO.	DESCRIPTION	P	er Staff	L	PLANT	(Col A - Col B)	RATE		Col C x Col D)
1	301	Organization Cost	\$	1			\$ -	0.00%		-
2	302	Franchise Cost	\$	-	\$		\$ -	4.00%		-
3	303	Other Intangibles	\$	13	\$		\$ 13	7.97%		1
4		Water Rights	\$	0	\$		\$ 0	0.00%		-
5		Other Source of Supply Land	\$	52	\$		\$ 52	0.00%		-
6	310.4	Wells - Other	\$	-	\$		\$ -	2.50%		-
7	314	Wells	\$	466,816	\$		\$ 466,816	3.13%		14,611
8	320	Pumping Plant Land	\$	-	\$		\$ -	0.00%		-
9	321	Pumping Plant Structures & Improvements	\$	53,685	\$		\$ 53,685	2.86%		1,535
10	325	Electric Pumping Equipment	\$	416,672	\$		\$ 416,672	5.88%		24,500
11	328	Gas Engine Equipment	\$	-	\$		\$ -	4.00%		-
12	330	Water Treatment Plant - Land	\$	-	\$		\$ -	0.00%		
13	331	Water Treatment Structures and Improvements	\$	•	\$		\$ -	2.50%		-
14	332	Water Treatment Equipment	\$	3	\$		\$ 3	2.86%		0
15	340	Transmission and Distribution - Land	\$	•	\$		\$ -	0.00%		- ,
16	342	Storage Tanks	\$		\$		\$ -	2.00%		
17	343	Transmission and Distribution Mains	\$	2,312,756	\$		\$ 2,312,756	1.79%		41,398
18	344	Fire Sprinkler Taps	\$	15,243	\$		\$ 15,243	2.00%		305
19	345	Services	\$	208,294	\$		\$ 208,294	2.38%		4,957
20	346	Meters	\$	53,814	\$		\$ 53,814	4.55%		2,449
21	348	Hydrants	\$	136,178	\$		\$ 136,178	1.82%		2,478
22	389	General Plant Land	\$		\$		\$ -	0.00%		<u>.</u>
23	390	General Plant Structures	\$	161	\$		\$ 161	2.50%		4
24		Leasehold Improvements	\$	2,315	\$		\$ 2,315	1.73%		40
25	391	Office Furniture & Equipment	\$	7,359	\$		\$ 7,359	6.67%		491
26	393	Warehouse Equipment	\$	19	\$		\$ 19	5.00%		1
27	394	Tools, Shops, and Garage Equipment	\$	399	\$		\$ 399	4.00%		16
28	395	Laboratory Equipment	\$	7	\$		\$ 7	5.00%	•	0
29	396	Power Operated Equipment	\$	2	\$		\$ 2	6.67%		0
30	397	Communications Equipment	\$	21,948	\$		\$ 21,948	6.67%		1,464
31	398	Miscellaneous Equipment	\$	11	\$	-	\$ 11	3.33%	\$	0
32		Intentionally Left Blank		0.005.747	_		0.005.740			04.050
33		Total Plant	\$	3,695,747	4	1	\$ 3,695,746		\$	94,252
34		One of the Description Date (Description of the Disease)		0.0007		,				
35		Composite Depreciation Rate (Depr Exp / Depreciable Plant):		2.00%						
36		CIAC:		226,219 4,524						
37		Amortization of CIAC (Line 35 x Line 36):	Þ	4,524						
38		Depreciation Expense Before Amortization of CIAC:	e	94,252						
39				4,524						
40		Less Amortization of CIAC:		89,728						
41		Depreciation Expense - Company:		89,428						
42 43		Staff's Total Adjustment:		300	•					
45		Statis (Stat Adjustment.	<del>-</del>	300	:					

References:
Column [A]: Schedule JMM-4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

#### OPERATING INCOME ADJUSTMENT NO. 8 - TEST YEAR INCOME TAXES

LINE NO.	DESCRIPTION	COMPANY PROPOSED	STAFF ADJUSTMENTS	STAFF RECOMMENDED
1	Federal Income Taxes	\$ (38,543)	\$ (934)	\$ (39,477)
2	State Income Taxes	(8,491)	(205)	(8,696)
3	Federal and State Income Taxes	\$ (47,034)	\$ (1,139)	\$ (48,173)

References: Column (A), Company Schedule C-1 Column (B): Column [C] - Column [A] Column (C): Schedule JMM-2

## OPERATING INCOME ADJUSTMENT NO. 9 - PROPERTY TAX EXPENSE

			[A]		[B]
LINE			STAFF		STAFF
NO.	Property Tax Calculation	AS.	ADJUSTED_	REC	OMMENDED
1	Staff Adjusted Test Year Revenues	\$	117,103	\$	117,103
2	Weight Factor		2		2
3	Subtotal (Line 1 * Line 2)		234,206	\$	234,206
4	Staff Recommended Revenue, Per Schedule JMM-1		117,103	\$	243,689
5	Subtotal (Line 4 + Line 5)		351,309		477,895
6	Number of Years		3		3
7	Three Year Average (Line 5 / Line 6)		117,103	\$	159,298
8	Department of Revenue Mutilplier		2		2
9	Revenue Base Value (Line 7 * Line 8)		234,206	\$	318,597
10	Plus: 10% of CWIP -		-		-
11	Less: Net Book Value of Licensed Vehicles		•	\$	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)		234,206	\$	318,597
13	Assessment Ratio		20.5%		20.5%
14	Assessment Value (Line 12 * Line 13)		48,012	\$	65,312
15	Composite Property Tax Rate (Per Company Schedule)		10.3038%		10.3038%
16					
17	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$	4,947		
18	Company Proposed Property Tax		5,275		
19					
20	Staff Test Year Adjustment (Line 17-Line 18)	_\$	(328)		
21	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)			\$	6,730
22	Staff Test Year Adjusted Property Tax Expense (Line 17)			\$	4,947
23	Increase in Property Tax Expense Due to Increase in Revenue Requirement			\$	1,783
24					
25	Increase to Property Tax Expense			\$	1,783
26	Increase in Revenue Requirement			*	126,586
	Increase to Property Tax per Dollar Increase in Revenue (Line25/Line 26)				1.408191%
2,	more desired to the period of				1.10010170

# Arizona Water Company Cost of Capital Calculation

Capital Structure

And Weighted Average Cost of Capital Staff Recommended and Company Proposed

[A]	(B)	[C]	[D]
			Weighted
Description	Weight (%)	Cost	<u>Cost</u>
Staff Recommended Str	ucture		
Debt	49.0%	6.8%	3.3000%
Common Equity	51.0%	9.4%	<u>4.8000%</u>
Weighted Average Cost	of Capital		8.1000%
Company Proposed Stru	cture <sup>1</sup>		
Debt	49.0%	6.8%	3.3000%
Common Equity	51.0%	12.5%	<u>6.4000%</u>
Weighted Average Cost	of Capital		9.7000%

<sup>&</sup>lt;sup>1</sup> Company Schedule D-1, page 2

[D]: [B] x [C]

SURREBUTTAL TESTIMONY OF Jeffrey M. Michlik

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JMM-3	RATE BASE - ORIGINAL COSTS
JMM-4	SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS
JMM-5	ORIGINAL COST RATE BASE ADJUSTMENT # 1 - RUCO RATE BASE ADJUSTMENT
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JMM-16	OPERTING INCOME ADJUSTMENT # 7 - DEPRECIATION EXPENSE
JMM-17	OPERTING INCOME ADJUSTMENT # 8 - INCOME TAX EXPENSE
JMM-18	OPERTING INCOME ADJUSTMENT # 9 - PROPERTY TAX EXPENSE

## **REVENUE REQUIREMENT**

LINE		(A) OMPANY FAIR	(B) STAFF FAIR
<u>NO.</u>	DESCRIPTION	<u>VALUE</u>	VALUE
1	Adjusted Rate Base	\$ 306,862	\$ 304,528
2	Adjusted Operating Income (Loss)	\$ 11,131	\$ 14,926
3	Current Rate of Return (L2 / L1)	3.63%	4.90%
4	Required Rate of Return	9.72%	8.1%
5	Required Operating Income (L4 * L1)	\$ 29,820	\$ 24,667
6	Operating Income Deficiency (L5 - L2)	\$ 18,689	\$ 9,741
7	Gross Revenue Conversion Factor	1.6729	1.6762
8	Required Revenue Increase (L7 * L6)	\$ 31,264	\$ 16,328
9	Adjusted Test Year Revenue	\$ 102,098	\$ 102,098
10	Proposed Annual Revenue (L8 + L9)	\$ 133,362	\$ 118,426
11	Required Increase in Revenue (%)	30.62%	15.99%

References:

Column (A): Company Schedule A-1

Column (B): Staff Schedules JMM-3 and JMM-7

## GROSS REVENUE CONVERSION FACTOR

LINE <u>NO.</u>	DESCRIPTION	(A)	(B)	(C)	(D)
2 3 4 5	Calculation of Gross Revenue Conversion Factor: Revenue Uncollecible Factor (Line 11) Revenues (L1 - L2) Combined Federal and State Income Tax and Property Tax Rate (Line 23) Subtotal (L3 - L4) Revenue Conversion Factor (L1 / L5)	100.0000% 0.0000% 100.0000% 40.3425% 59.6575% 1.676235	-		
8 9 10	Calculation of Uncollecttible Factor. Unity Combined Federal and State Tax Rate (Line 23) One Minus Combined Income Tax Rate (L7 - L8) Uncollectible Rate Uncollectible Factor (L9 * L10)	100.0000% 38.5989% 61.4011% 0.0000% 0.0000%	-		
13 14 15 16	Calculation of Effective Tax Rate:  Operating Income Before Taxes (Arizona Taxable Income) Arizona State Income Tax Rate Federal Taxable Income (L12 - L13) Applicable Federal Income Tax Rate (Line 55) Effective Federal Income Tax Rate (L14 x L15) Combined Federal and State Income Tax Rate (L13 +L16)	100.0000% 6.9680% 93.0320% 34.0000% 31.6309%			
19 20 21 22	Calculation of Effective Property Tax Factor Unity Combined Federal and State Income Tax Rate (L17) One Minus Combined Income Tax Rate (L18-L19) Property Tax Factor (JMM-17, L27) Effective Property Tax Factor (L20*L21) Combined Federal and State Income Tax and Property Tax Rate (L17+L22)	100.0000% 38.5989% 61.4011% 2.8397%		40.3425%	
24 25	Required Operating Income (Schedule JMM-1, Line 5) AdjustedTest Year Operating Income (Loss) Required Increase in Operating Income (L24 - L25)	\$ 24,667 14,926	\$ 9,741		
27 28 29	Income Taxes on Recommended Revenue (Col. [E], L52) Income Taxes on Test Year Revenue (Col. [B], L52) Required Increase in Revenue to Provide for Income Taxes (L27 - L28)	\$ 9,189 3,066	6,123		
31 32 33	Recommended Revenue Requirement (Schedule JMM-1, Line 10) Uncollectible Rate (Line 10) Uncollectible Expense on Recommended Revenue (L30*L31) Adjusted Test Year Uncollectible Expense Required Increase in Revenue to Provide for Uncollectible Exp. (L32-L33)	\$ 118,426 0.0000% \$ - \$ -			
36 37	Property Tax with Recommended Revenue (JMM-17, Col B, L31) Property Tax on Test Year Revenue (JMM-17, Col A, L17) Increase in Property Tax Due to Increase in Revenue (L35-L36) Total Required Increase in Revenue (L26 + L29 + L34 + L37)	\$ 9,162 8,698		· -	
40	<u>Calculation of Income Tax:</u> Revenue (Schedule JMM-7, Col. [C], Line 5 & Sch. JMM-1, Col. [D] Line 10) Operating Expenses Excluding Income Taxes	Test Year \$ 102,098 \$ 84,106		Staff Recommended \$ 118,426 \$ 84,570	
42 43 44	Synchronized Interest (L56) Arizona Taxable Income (L39 - L40 - L41) Arizona State Income Tax Rate Arizona Income Tax (L42 x L43)	\$ 10,049 \$ 7,942 6.9680% \$ 553 \$ 7,389	- 6	\$ 10,049 \$ 23,806 6.9680% \$ 1,659 \$ 22,148	
46 47 48 49 50	Federal Taxable Income (L42 - L44) Federal Tax on First Income Bracket (\$1 - \$50,000) @ 34% Federal Tax on Second Income Bracket (\$51,001 - \$75,000) @ 34% Federal Tax on Third Income Bracket (\$75,001 - \$100,000) @ 34% Federal Tax on Fourth Income Bracket (\$100,001 - \$335,000) @ 34% Federal Tax on Fifth Income Bracket (\$335,001 -\$10,000,000) @ 34%	\$ 2,512 \$ - \$ - \$ - \$ -		\$ 7,530 \$ - \$ - \$ - \$ -	
52	Total Federal Income Tax Combined Federal and State Income Tax (L44 + L51)  Applicable Federal Income Tax Rate [Col. [E], L51 - Col. [B], L51] / [Col. [E], L45	\$ 2,512 \$ 3,066 - Col. [B], L45]		\$ 7,530 \$ 9,189 34.0000%	
54 55	Calculation of Interest Synchronization: Rate Base (Schedule JMM-3, Col. (C), Line 17 Weighted Average Cost of Debt Synchronized Interest (L45 X L46)	\$ 304,528 3.39 \$ 10,049	<u>6</u>		

### **RATE BASE - ORIGINAL COST**

LINE NO.		C	(A) OMPANY AS FILED		(B) TAFF STMENTS	Adj. <u>No.</u>		(C) STAFF AS DJUSTED
1 2 3	Plant in Service Less: Accumulated Depreciation Net Plant in Service	\$	591,416 220,207 371,209	\$	12 - 12		\$	591,428 220,207 371,221
4 5 6	LESS:							
7 8	Contributions in Aid of Construction (CIAC) Less: Accumulated Amortization	\$	21,225 984	\$			\$ \$	21,225 984
9 10	Net CIAC		20,241		-		\$	20,241
11 12	Advances in Aid of Construction (AIAC)		-	,	-			-
13 14	Customer Deposits		1,249		-			1,249
15 16 17	Deferred Income Tax Credits		48,199		•			48,199
18 19 20	ADD:							
21 22	Working Capital		5,343		(2,347)	3		2,996
23 24 25	Deferred Regulatory Assets		-		-			-
26	Original Cost Rate Base	\$	306,862	\$	(2,334)		\$	304,528

# References:

Column [A]: Company as Filed Column [B]: Schedule JMM-4

Column (C): Column (A) + Column (B)

# SUMMARY OF ORIGINAL COST RATE BASE ADJUSTMENTS

[E] STAFF <u>ADJUSTED</u>		- 6	2,0/2 61	2,911	422	• .	48,327	6.072	157.859	22 -	,	3,906	23,287	28 903	-		•		26,410	, ,	2 033	9322	24	3,882	1,040	: :	14,887	·	591,428		591,428	220,207		371,221			984	142,02	1,249	48,199			2,996	7	304 538	
_	_ [-	,		· 69	1	€9	6 <del>9</del> (	<i>ε</i> > <i>ε</i>	<del>9 69</del>	1	€	€ <del>7</del> > 1	ε <b>γ</b> ε <del>ε</del> ν	• 69	· <del>67</del>	<b>⇔</b>	<del>69</del>	<del>()</del>		5 <del>7)</del> 6		9 69	,	1	<b>↔</b>	<del>6/3</del> (	6 <del>9</del> 69	1		ľ	<del></del>			*    -		6 <del>7</del>			,				(2,347)		10.00	347)
[D] ADJ#3 Cash Working	Capital  Ref: Sch JMM-7																																										(2	ļ.	5	51
		] ₩																												·	<del>so</del>			<b>₩</b>		↔									6	<i>-</i>
[C] <u>ADJ #2</u>	Not Used Ref: Sch JMM-6			•	•	1	t	•		٠	•	1		•	•	•	1	•	•		• 1	•	•	,	•	•		•	'		•	į	1	•		1		•	•	•			•	į		-
∢	Ref	₩																												•	<del>9</del>			69		69									6	A
되	ustment JMM-5			1	,										,						• 1	•	•	(49)		. :	09	•		,	12	ı	1	12		,	-			,			ı	1	4	12
[B] ADJ #1	RUCO Adjustment Ref: Sch JMM-5	\$																													÷			8		€									6	A
	L ¥Ω	_ ;	2,072 61	2,911	422		48,327	2	6,073 157 859	2 '		3,906	23,287	28 903	120,932	,	109,946	27,419	5,410	. 6	200	4,332 9,322	24	3,931	1,040	ကျ	14,827	•	591,416		591,416	220,207		371,209			984	1,54	1.249	48,199	i		5,343	: ' :	•	306,862
₹	COMPANY AS FILED	€	. •	•			4		15.	2			Ň	2	121		100	7	ĸ		•		•				<del>-</del>		59		.69 28	22		\$ 37		5	Č	ŭ		4						30
																													•	ı				,ıı			•								,	
	<u>WCE:</u>	st	Franchise Cost Other Intandibles	Water Rights	Other Source of Supply Land	Wells - Other	Wells	Pumping Plant Land	Pumping Plant Structures & Improvements Electric Pumping Fauricment	Gas Engine Equipment	Water Treatment Plant - Land	Water Treatment Structures and Improvements	Water Treatment Equipment	Chrane Tanks	Transmission and Distribution Mains	Fire Sprinkler Taps	Services	Meters	Hydrants	General Plant Land	General Plant Structures	Describit improvements	Warehouse Equipment	Tools, Shops, and Garage Equipment	Laboratory Equipment	Power Operated Equipment	Communications Equipment	Intentionally Left Blank			Total Plant in Service	Less: Accumulated Depreciation		Net Plant in Service		Contributions in Aid of Construction (CIAC)	Less: Accumulated Amortization	Net CIAC (L.23 - L.29) Advances in Aid of Construction (AIAC)	Customer Deposits	Deferred Income Taxes			Canital	Deffered Regulatory Assets		Original Cost Rate Base
ACCT.	PLANT IN SERVICE:	301	302 303	310.1	310.3	310.4	314	320	325	328	330	331	332	34.5	343	344	345	346	348	389	350	307.1	393	394	395	396	397	969			Total Pla	Less: Ac		Net Plan	LESS:	Contribu	Less: /	Advance	Custome	Deferred		Ċ	Working Capital	Deffered		Origina
NO.	PLAN	- 7	ω 4	· w	9	7	80	თ 5	2 ₹	7	13	14	ភ ជ	2 5	: 8	19	20	21	55	8 8	4 4	2 2	27	28	58	30	£ 5	3 6	34	35	36	38	38	<del>4</del> 5	42	43	44	4.46	47	48	49	20	52	23	45	S

### RATE BASE ADJUSTMENT NO. 1 - RUCO RATE BASE ADJUSTMENT

			[A]	[B]		[C]
LINE NO.	ACCT NO.	DESCRIPTION	 MPANY OPOSED	 TAFF STMENTS	ĺ .	STAFF OMMENDED
1	Phoenix	Meter Shop				
2	394	Tools, Shops, and Garage Equipment	\$ 3,931	\$ (49)	\$	3,882
3	397	Communications Equipment	14,827	60		14,887
4		•	\$ 18,758	\$ 12	\$	18,770
_			 	 		

### REFERENCES:

Column [A]: Company Filing Column [B]: Testimony JMM

Column [C]: Column [A] + Column [B]

RATE BASE ADJUSTMENT NO. 2 - NOT USED

### RATE BASE ADJUSTMENT NO. 3 - CASH WORKING CAPITAL

				[A]	[B]	[C]	[D]	[E]		[F]
LINE	ACCT			MPANY	STAFF	STAFF				
NO.	NO.	DESCRIPTION		OPOSED	ADJUSTMENTS	RECOMMENDED				
1		Working Capital	\$	5,343	\$ (2,347)	\$ 2,996				
2										
3										
4										
5				est Year			Net	Lead / Lag		ting Cash
6				djusted	Revenue	Expense	Lag Days	Factor		uirement
7			I	Results			[B - C]	[D + 365]	[/	XE
8	Staff's Ca								_	
9	Purchase	d Power	\$	6,822	29.68	30.87	(1.19)	(0.0033)	\$	(22)
10	Payroll			20,662	29.68	14.00	15.68	0.0430		888
11	Purchase			-	29.68	-	29.68	0.0813		•
12	Chemical			5,807	29.68	(18.11)	47.79	0.1309		760
13		& Liability Insurance		1,053	29.68	(45.27)	74.95	0.2053		216
14		's Compensation Insurance		241	29.68	(46.50)	76.18	0.2087		50
15	Health Ins			3,680	29.68	(8.92)	38,60	0.1058		389
16		M (Excluding Rate Case Expense)		12,202	29.68	(9.27)	38.95	0.1067		1,302
17		ncome Taxes		7,530	29.68	37.00	(7.32)	(0.0201)		(151)
18		ome Taxes		1,659	29.68	37.00	(7.32)	(0.0201)		(33)
19	FICA Tax			1,549	29.68	14.00	15.68	0.0430		67
20		SUTA Taxes		50	29.68	83.10	(53.42)	(0.1464)		(7)
21	Property 7			9,162	29.68	212.00	(182.32)	(0.4995)		(4,576)
22		on, Svc. Contracts, & Misc. Fees		1,035	29.68	(98.83)	128.51	0.3521		364
23	Retiremer	nt Annuities (401k)		1,887	29.68	34.72	(5.04)	(0.0138)		(26)
24										
25										
26			\$	73,339					\$	(780)
27		Subtotal								
28							(04 57)	(0.4007)		(4.700)
29	Interest E			10,268	29.68	91.25	(61.57)	(0.1687)		(1,732)
30	Cost of Ed	quity		-		-	-	-		•
31										// Manah
32		Subtotal	\$	10,268					\$	(1,732)
33										
34										(0.540)
35	٦	Total .	<b>-</b>	83,606					\$	(2,512)
36		;								
37	Company	Cash Working Capital							\$	(165)
38										(0.047)
39	Increase/(	Decrease)							\$	(2,347)

REFERENCES:
Column [A]: Company Filing
Column [B]: Direct Testimony JMM
Column [C]: Column [A] + Column [B]

### OPERATING INCOME STATEMENT - ADJUSTED TEST YEAR AND STAFF RECOMMENDED

		C	[A] DMPANY		[B]		[C] STAFF		[D]		(E)
		_	JUSTED	s	TAFF		ST YEAR	5	STAFF		
LINE			ST YEAR	TES	T YEAR	•	AS	PRO	OPOSED		STAFF
NO.	DESCRIPTION	A	SFILED	ADJU:	STMENTS	<u>1A</u>	JUSTED	<u>CH</u>	IANGES	RECO	MMENDED
1	OPERATING REVENUES:										
2	Residential	\$	54,242	\$	-	\$	54,242	\$	16,328	\$	70,570
3	Commercial	•	43,098	•	-		43,098		· •		43,098
4	Industrial		3,089		-		3,089		-		3,089
5	Private Fire Service		-				-				-
6	Other Water Revenues		-		. <del>-</del>				•		-
7	Total Water Revenues	\$	100,429	\$	-	\$	100,429	\$	16,328	\$	116,757
8											
9	Miscellaneous		1,669.00				1,669.00				1,669
10	Total Operating Revenues	\$	102,098	\$		\$	102,098	\$	16,328	\$	118,426
11											
12	OPERATING EXPENSES:										
13	Source of Supply Expenses										
14	Purchased Water	\$	-	\$	-	\$	-	\$	-	\$	-
15	Other		388		(6)		382		-		382
16	Pumping Expenses										
17	Purchased Power		6,781		41		6,822		-		6,822
18	Purchased Gas		-				-		-		-
19	Other		4,108		(561)		3,547		-		3,547
20	Water Treatment Expenses		7,361		(11)		7,351		-		7,351
21	Transmission and Distribution Expenses		16,617		(5,782)		10,835		-		10,835
22	Customer Accounting Expenses		10,673		(57)		10,616		-		10,616
23	Sales Expense		<u>-</u>		-		<u>-</u>		•		-
24	Administrative and General Expenses		14,757		(538)		14,219				14,219
25	Total Operation and Maintenance Expense		60,687		(6,914)		53,773		-		53,773
26					_		20.007				00.007
27	Depreciation and Amortization Expenses		20,295		2		20,297				20,297
. 28	<b>T</b>										
29	Taxes		445		2.067		2.512		E 040		7 520
30	Federal Income Taxes		445 98		2,067 455		2,512 553		5,018 1,105		7,530 1,659
31	State Income Taxes		8,104		455 594		8,698		464		9,162
32 33	Property Taxes		1,339		594		1,339		404		1,339
	Other Tatal Tayon				3.117		13,103		6.587		19,690
34 35	Total Taxes		9,986 -		3,117		13,103		0,507		19,080
35 36			<del>-</del>		•		-		-		-
36 37	Total Operating Expenses		90.967		<del></del>		87,172		6,587		93,759
37 38	Total Operating Expenses		30,307				01,112		0,001		00,709
39	Operating Income (Loss)	_\$	11,131	\$	3,795	\$	14,926	\$	9,741	\$	24,667

References:
Column (A): Company Schedule C-1
Column (B): Schedule JMM-8
Column (C): Column (A) + Column (B)
Column (D): Schedules JMM-16 and JMM-17
Column (E): Column (C) + Column (D)

Arizona Water Company - Winkelman Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

SUMMARY OF OPERATING INCOME STATEMENT ADJUSTMENTS - TEST YEAR

	₹	<b>19</b> .	<u>5</u>	Ω	<u> </u>	<u> </u>	Ē	:			
LINE ACCT.			. !	Removal of Pumping	ſ	Ξ	<u>5</u>	Ξ	E	S	Z
NO. NO.	COMPANY	Keverse Unbilled Expenses	Fieet Fuel Expense	Transmission and Distribution Projection	RUCO Miscellaneous Expense Adjustment	Not Lies	Rate Case		Income Tax	Property	STAFF
1 OPERATING REVENUES:	AS FILED	Ref. Sch. IMM. 10	ADJ #2	ADJ #3	ADJ #4	ADJ #5	ADJ #6	Not Used ADJ #7	Expense ADI #8	Expense	21101
2 Residential	\$ 54,242	\$	S Sai Januari I	S Arei. Sch JMM-12	Ker: Sch JMM-13	Ref: Sch JMM-14	Ref: Sch JMM-15	Ref. Sch JMM-16	Ref: Sch JMM-17	Ref. Sch.:IMM-18	AUSOSED
3 Commercial	43,098	,	•	•	•	,			4		54.242
A industrial	3,089	•	٠		•		•	•		•	43,098
6 Other Water Revenues	• •		•		•	•	• •	•	•	•	3,089
7 Total Water Revenues	\$ 100,429	65	\$			,					
8 9 Miscellaneous	1,660			•	,	•	, w			\$	100,429
Total Op	l`		55							•	1,560
				•		4	•		•		102 008
											102,030
13 Source of Supply Expenses	•							•			
15 Other	•		•		٠	•	•	•	•		•
Pumain	388	(9)	3		•			• •	•	•	t
	R 781	¥								•	382
18 Purchased Gas			•	ŧ	•	•	•	•			6
	4.108				•	•	•				779'0
20 Water Treatment Expenses	7,361	3		(040)	•	•	٠	,		•	2 547
	16,617	(145)		(5 603)	•		•	•	•		736,7
	10,673	(47)			•	•	•	•	•		10.835
23 Sales Expense	. •				•		•	•	•		10,616
•		(48)	(4)	•	. 6	•			•	•	
25 Lotal Operation and Maintenance Expense 26	\$ 60,687	\$ (218)	\$	\$ (6,145)	(35)	\$ (	\$ (451)				14,219
27 Depreciation and Amortization Expenses	20,295	t	•					· ,	•	· ' '	53,773
28 20 Tanas	-			•	•	•	•	2	•	•	20,297
dygs									•		
30 rederal income Taxes	445	•	•	•	•			•	•		
	86	•	•	•		•	•	•	2,067		2,512
32 Property Taxes	8,104	•	•	•	ı j	•	•	•	455	•	553
33 Other			•	•		•	•	•	•	594	8,698
34   Otal   axes	\$ 9,986	•		\$			,		,	•	1,339
35 Total Operating Exercise	-			*	•	•	•		\$ 2,523	\$ 584 \$	13,103
37 Joint Operating Expenses	296'06	(218) \$	(65)	\$ (6,145) \$	(35)	6	\$ (451)	\$	6 2 503	103	
38 Operating Income (Loss)	\$ 11131	210							\$ 2253	5 294 \$	87,172
, , , , , , , , , , , , , , , , , , , ,	H	017	CD CD	\$ 6,145	35	, •	3 441			•	

(594) \$

### OPERATING INCOME ADJUSTMENT NO. 1 - REVERSE UNBILLED EXPENSES

			[A]		[B]		[C]
LINE			COMPANY		STAFF		STAFF1
NO.	DESCRIPTION	<u></u>	PROPOSED	^	DJUSTMENTS	RE	COMMENDED
1	Residential	\$	54,242	\$	-	\$	54,242
2	Commercial		43,098		-		43,098
3	Industrial		3,089				3,089
4	Revenue Adjustments	\$	100,429	\$	-	\$	100,429
5							
6	Source Supply - Other	\$	383	\$	-	\$	383
7	Unbilled Expenses		5		(5)		-
8	Total Source Supply - Other	\$	388	\$	(5)	\$	383
9							
10	Purchased Power	\$	6,822	\$	-	\$	6,822
11	Unbilled Expenses		(41)		41		
12	Total Purchased Power	\$	6,781	\$	41	\$	6,822
13							
14	Pumping Expense - Other	\$	4,101	\$	-	\$	4,101
15	Unbilled Expenses		7		(7)		
16	Total Pumping Expense - Other	_\$	4,108	\$	(7)	\$	4,101
17							
18	Water Treatment Expenses	\$	7,354	\$	-	\$	7,354
19	Unbilled Expenses				(7)		
20	Total Water Treatment Expenses	\$	7,361	\$_	(7)	\$	7,354
21							
22	Transmission and Distribution Expenses	\$	16,474	\$	-	\$	16,474
23	Unbilled Expenses		144		(144)		
24	Total Transmission and Distribution Expenses	\$	16,617	\$	(144)	\$	16,474
25							
26	Customer Accounting Expenses	\$	10,626	\$	-	\$	10,626
27	Unbilled Expenses		47		(47)		
28	Total Customer Accounting Expenses	\$	10,673	\$	(47)	\$	10,626
29							
30	Administrative and General Expenses	\$	14,709	\$	-	\$	14,709
31	Unbilled Expenses		48		(48)		
32	Total Administrative and General Expenses	\$	14,757	\$	(48)	\$	14,709
33							
34	Total Expense Adjustments	\$	60,687	\$	(218)	\$	60,469
	•						

References:
Column (A), Company Schedule C-1
Column (B): Testimony JMM
Column (C): Column (A) + Column (B)

### OPERATING INCOME ADJUSTMENT NO. 2 - FLEET FUEL EXPENSE

			[A]		[B]		[C]
LINE		T	COMPANY		STAFF		STAFF <sup>1</sup>
NO.	DESCRIPTION		PROPOSED	4	ADJUSTMENTS	R	ECOMMENDED
1	Source Supply - Other	\$	102,093	\$	-	\$	102,093
2	Fleet Fuel Expenses		5		(1)		4
3	Total Source Supply - Other	\$	102,098	\$	(1)	\$	102,097
4							
5	Pumping Expense - Other	\$	4,053	\$	-	\$	4,053
6	Fleet Fuel Expenses		55		(11)		44
7	Total Pumping Expense - Other	\$	4,108	\$	(11)	\$	4,097
8							
9	Water Treatment Expenses	\$	7,344	\$	-	\$	7,344
10	Fleet Fuel Expenses		17		(3)		14
11	Total Water Treatment Expenses	\$	7,361	\$	(3)	\$	7,358
12							
13	Transmission and Distribution Expenses	\$	(16,101)	\$	-	\$	(16,101)
14	Fleet Fuel Expenses		32,718		(36)		32,682
15	Total Transmission and Distribution Expenses	\$	16,617	\$	(36)	\$	16,581
16							
17	Customer Accounting Expenses	\$	1,854	\$	-	\$	1,854
18	Fleet Fuel Expenses		8,819		(10)		8,809
19	Total Customer Accounting Expenses	\$	10,673	\$	(10)	\$	10,664
20							
21	Administrative and General Expenses	\$	14,739	\$	-	\$	14,739
22	Fleet Fuel Expenses		18		(4)		14
23	Total Administrative and General Expenses	\$	14,757	\$	(4)	\$	14,753
24		F					<u> </u>
25	Total Expense Adjustments	\$	155,615	\$	(65)	\$	155,550
26							
27							
28	Staff's Calculation based on the most recent 12	mont	h gas price of \$ 3.38				
29			3				
30			Company Pro-forma	Stat	ff's Recalculation		Reduction
31	Source Supply - Other	\$	5	\$	4	\$	1
32	Pumping Expenses Other		55		44		11
33	Water Treatment Expenses		17		14		3
34	Transmission and Distribution Expenses		180		144		36
35	Customer Accounting Expenses		49		39		10
36	Administrative and General Expenses		18		14		4
37	Totals	\$	324	\$	259	\$	65

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References:
Column (A), Company Schedule C-1
Column (B): Testimony JMM
Column (C): Column (A) + Column (B)

### OPERATING INCOME ADJUSTMENT NO. 3 - REMOVAL OF PROJECTED EXPENSES

		[A]		[B]		[C]
LINE NO.	DESCRIPTION	COMPANY PROPOSED	,	STAFF ADJUSTMENTS	REC	STAFF <sup>1</sup> COMMENDED
1	Pumping Expenses - Other	\$ 3,565	\$	_	\$	3,565
2	Normalization of Pumping Expenses	543		(543)	\$	-
3	Total Pumping Expense - Other	\$ 4,108	\$	(543)	\$	3,565
4						
5	Transmission and Distribution Expenses	\$ 11,015	\$	-	\$	11,015
6	Normalization of Transmission and Distribution Expenses	5,603		(5,603)		
7	Total Transmission and Distribution Expenses	\$ 16,617	\$	(5,603)	\$	11,015

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

References: Column (A), Company Schedule C-1

Column (B): Testimony JMM

Column (C): Column (A) + Column (B)

## OPERATING INCOME ADJUSTMENT NO. 4 - RUCO MISCELLANEOUS EXPENSE ADJUSTMENT

		[A]	[B]	[C]
LINE		COMPANY	STAFF	STAFF <sup>1</sup>
NO.	DESCRIPTION	PROPOSED	ADJUSTMENTS	RECOMMENDED
1	Administrative and General Expenses	\$ 14,757	\$ (35)	\$ 14,722

<sup>&</sup>lt;sup>1</sup> Amounts do not reflect other adjustments.

### References:

Column (A), Company Schedule C-1

Column (B): Testimony JMM

Column (C): Column (A) + Column (B)

Surrebuttal Schedule JMM-14

Arizona Water Company - Winkelman Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

**OPERATING INCOME ADJUSTMENT NO. 5 - NOT USED** 

Arizona Water Company - Winkelman Docket No. W-01445A-11-0310 Test Year ended December 31, 2010

# OPERATING INCOME ADJUSTMENT NO. 6 - RATE CASE EXPENSE

[A] (B) (C)	COMPANY STAFF STAFF <sup>1</sup>	PROPOSED ADJUSTMENTS RECOMMENDED	nses \$ 14,072 \$ - \$ 14,072	685 (451) 234	\$ 14,757 \$ (451) \$ 14,306
		DESCRIPTION	Administrative and General Expens	Rate Case Expense Pro Forma	Total Administrative and General
	LINE	NO.	-	7	က

	Staff's Calculation of Rate Case Expense for Pinal Valley	for Pinal Valley						
				[ <del>V</del> ]	(B)	[0]	[0]	Ξ
			Averane	T.Y. 2010 Rate Case	o itorilomoly	Annual	T.Y. 2010 Prior Rate	
Line	200000		Number of	Estimate /	Period	Pro Forma	Charged to	Increase /
<u>:</u>			Customers	Spread	in Years	Rate Case Exp.	O&M - 928.2	(Decrease)
. 2	Ali Systems							
ဂ		Pinal Valley	28,030	206,277.86	က			
4		White Tank	1,927	14,177.38	က			
2		Ajo	629	4,997.47	က			
9		Superstition	23,792	175,085.54	ဗ			
7		Cochise	6,404	47,130.98	က			
œ		San Manuel	1,476	10,860.25	ო			
O		Oracle	1,521	11,189.57	ო			
9		SaddleBrooke Ranch	89	651.28	ო			
7		Winkelman	157	1,152.32	ო	\$ 384	150	\$ 234
12		Navajo	060'6	66,897.02	က			
13		Verde Valley	10,569	77,779.34	ო			
7 ;			83,733	616,199				
15								
16	Rate Case Expense Incurred Last Time		<b>ക</b> ∥	616,199				
6 5	Company Proposed Rate Case Expense Pro Forma	Pro Forma						989
50 -20	Staff Adjustment to Rate Case Expense						**	(451

234

685

<sup>1</sup> Amounts do not reflect other adjustments.

References: Column (A), Company Schedule C-1 Column (B): Testimony JMM Column (C): Column (A) + Column (B)

### OPERATING INCOME ADJUSTMENT NO. 7 - DEPRECIATION EXPENSE ON TEST YEAR PLANT

			[A]		[B]	[0]_	[D]	[E]
			PLANT In	Ī	NonDepreciable	DEPRECIABLE		DEPRECIATION
LINE	ACCT		SERVICE		or Fully Depreciated	PLANT	DEPRECIATION	EXPENSE
NO.	NO.	DESCRIPTION	Per Staff		PLANT	(Col A - Col B)	RATE	(Col C x Col D)
1	301	Organization Cost	\$	1		\$ -	0.00%	\$ -
2	302	Franchise Cost	\$ 2,0	72	\$ 2,072	\$ -	4.00%	\$ -
3	303	Other Intangibles	\$	61	\$ -	\$ 61	4.91%	\$ 3
4	310.1	Water Rights	\$ 2,9	11	\$ -	\$ 2,911	0.00%	\$ -
5	310.3	Other Source of Supply Land	\$ 4	22	\$ -	\$ 422	0.00%	\$ -
6	310.4	Wells - Other	\$	-	\$ -	\$ -	2.50%	\$ -
7	314	Wells	\$ 48,3	27	\$ -	\$ 48,327	3.13%	\$ 1,513
8	320	Pumping Plant Land	\$	-	\$ -	\$ -	0.00%	\$ -
9	321	Pumping Plant Structures & Improvements	\$ 6,0	73	\$ -	\$ 6,073	2.86%	\$ 174
10	325	Electric Pumping Equipment	\$ 157,8	59	\$ -	\$ 157,859	5.88%	\$ 9,282
11	328	Gas Engine Equipment	\$	-	\$ -	\$ -	4.00%	
12	330	Water Treatment Plant - Land	\$	-	\$ -	<b>s</b> -	0.00%	
13	331	Water Treatment Structures and Improvements	\$ 3,9	06	\$ -	\$ 3,906	2.50%	•
14	332	Water Treatment Equipment	\$ 23,2		\$ -	\$ 23,287	2.86%	
15	340	Transmission and Distribution - Land	\$		\$ -	\$ -	0.00%	
16	342	Storage Tanks	\$ 28.9	13	\$ -	\$ 28,903	2.00%	
17	343	Transmission and Distribution Mains	\$ 120,9		\$ -	\$ 120,932	1.79%	
18	344	Fire Sprinkler Taps	\$ 120,5	-	\$ -	\$ 120,552	2.00%	
19	345	Services	\$ 109,9		\$ -	\$ 109,946	2.38%	
20	346	Meters	\$ 27,4			\$ 27,419	4.55%	
21	348	Hydrants	\$ 26,4		\$ -	\$ 26,410	1.82%	
22	389	General Plant Land	¢ 20,7		\$ -	\$ 20,410	0.00%	
23	390	General Plant Structures	¢ 3.	31	\$ -	\$ 331	2.50%	
24	390.1	Leasehold Improvements	\$ 2,9		\$ -	\$ 2,932	1.74%	
25	390.1	Office Furniture & Equipment		22		\$ 9,322	6.67%	
26	393	Warehouse Equipment			\$ -	\$ 5,322	5.00%	
27	394	Tools, Shops, and Garage Equipment	\$ 3,8		\$ -	\$ 3,882	4.00%	•
28			\$ 3,0°		•	\$ 1,040	5.00%	
20 29		Laboratory Equipment	Φ 1,U		\$ -	\$ 1,040	6.67%	•
29 30		Power Operated Equipment	<b>৯</b> \$14.8:	3	\$ - \$ -	• -	6.67%	•
			* * * * * * * * * * * * * * * * * * * *			\$ 14,887		•
31 32	398	Milesen — Harpman	<b>5</b> 4	79	-	\$ 479	3.33%	<b>a</b> 10
		Intentionally Left Blank	<b>\$</b> 591.4:	-	* 0.070	<b>6</b> 500.055	<del></del>	\$ 20,721
33		Total Plant	\$ 591,4	20	\$ 2,073	\$ 589,355		\$ 20,721
34		Accessive Book Control of the Child Blocks						
35		Composite Depreciation Rate (Depr Exp / Depreciable Plant):	2.0					
36		CIAC:_						
37		Amortization of CIAC (Line 35 x Line 36):	\$ 43	25				
38								
39		Depreciation Expense Before Amortization of CIAC:						
40		Less Amortization of CIAC:		25				
41		Test Year Depreciation Expense - Staff:						
42		Depreciation Expense - Company: _						
43		Staff's Total Adjustment:	<u> </u>	2				

References:
Column [A]: Schedule JMM-4
Column [B]: From Column [A]
Column [C]: Column [A] - Column [B]
Column [D]: Engineering Staff Report
Column [E]: Column [C] x Column [D]

### OPERATING INCOME ADJUSTMENT NO. 8 - TEST YEAR INCOME TAXES

LINE NO.	DESCRIPTION	COMPANY PROPOSED	STAFF ADJUSTMENTS	STAFF RECOMMENDED
1	Federal Income Taxes	\$ 445	\$ 2,067	\$ 2,512
2	State Income Taxes	98	455	553
3	Federal and State Income Taxes	\$ 543	\$ 2,523	\$ 3,066

References:
Column (A), Company Schedule C-1
Column (B): Column [C] - Column [A]
Column (C): Schedule JMM-2

### OPERATING INCOME ADJUSTMENT NO. 9 - PROPERTY TAX EXPENSE

			[A]		[B]
LINE			STAFF		STAFF
	Property Tax Calculation	AS A	ADJUSTED	REC	OMMENDED
1	Staff Adjusted Test Year Revenues	\$	102,098	\$	102,098
2	Weight Factor		2		2
3	Subtotal (Line 1 * Line 2)		204,196	\$	204,196
4	Staff Recommended Revenue, Per Schedule JMM-1		102,098	\$	118,426
5	Subtotal (Line 4 + Line 5)		306,294		322,622
6	Number of Years		3		3
7	Three Year Average (Line 5 / Line 6)		102,098	\$	107,541
8	Department of Revenue Mutilplier		2		2
9	Revenue Base Value (Line 7 * Line 8)		204,196	\$	215,081
10	Plus: 10% of CWIP -		-		-
11	Less: Net Book Value of Licensed Vehicles		-	\$	-
12	Full Cash Value (Line 9 + Line 10 - Line 11)		204,196	\$	215,081
13	Assessment Ratio		20.5%		20.5%
14	Assessment Value (Line 12 * Line 13)		41,860	\$	44,092
15	Composite Property Tax Rate (Per Company Schedule)		20.7785%		20.7785%
16					
17	Staff Test Year Adjusted Property Tax (Line 14 * Line 15)	\$	8,698		
18	Company Proposed Property Tax		8,104_		
19					
20	Staff Test Year Adjustment (Line 17-Line 18)	\$	594_		
21	Property Tax - Staff Recommended Revenue (Line 14 * Line 15)			\$	9,162
22	Staff Test Year Adjusted Property Tax Expense (Line 17)			\$	8,698
23	Increase in Property Tax Expense Due to Increase in Revenue Requirement			_\$	464
24	in the party of th				
25	Increase to Property Tax Expense			\$	464
26	Increase in Revenue Requirement			•	16,328
27	Increase in Revenue Requirement Increase to Property Tax per Dollar Increase in Revenue (Line25/Line 26)				2.839723%
21	increase to Froperty Tax per Bona, moreage in Neventae (Emelos Emelos)				

## **Arizona Water Company Cost of Capital Calculation**

Capital Structure
And Weighted Average Cost of Capital
Staff Recommended and Company Proposed

[A]	[B]	[C]	[D]

Description	Weight (%)	<u>Cost</u>	Weighted <u>Cost</u>
Staff Recommended Str	ucture		
Debt	49.0%	6.8%	3.3%
Common Equity	51.0%	9.4%	<u>4.8%</u>
Weighted Average Cost	of Capital		8.1%
Company Proposed Stru	icture <sup>1</sup>		
Debt	49.0%	6.8%	3.3%
Common Equity	51.0%	12.5%	<u>6.4%</u>
Weighted Average Cost	of Capital		9.7%

<sup>&</sup>lt;sup>1</sup> Company Schedule D-1, page 2

[D]: [B] x [C]

# **APPENDIX A**

										- C	
Table I	Superstition - Expenses	- Expenses (	Over the Ye	ars a	er the Years and Company's Proforma Adjustment	y's Pro	forma A	djustment		in the second	
	Acct.	Acct.	Acct.		Acct.	Acct.		Acct.		Acct.	
Year	0029	6701	6720		6730	6750	_	09/9		6770	Total
2000	\$ 10,449 \$	32,405	\$ 69,840	\$ 0	125,941	\$ 202,318	318 \$	56,896	↔	17,838 \$	515,687
2001	10,700	33,906	69,840	0	147,677	197,	197,648	74,998		38,653	573,422
2002	11,082	69,634	69,840	0	156,867	217,403	403	84,347		39,055	648,227
2003	11,937	35,373	69,840	0	158,691	236,457	457	124,809		33,220	670,326
2004	17,646	40,611	149,781	<del></del>	178,521	262,988	988	100,183		61,018	810,748
2005	21,891	42,421	176,417	7	173,846	237,320	320	113,470		49,773	815,138
2006	22,177	55,153	176,417	2	197,473	283,698	869	153,166		55,074	943,158
2007	21,789	58,395	176,417	7	322,392	280,368	368	177,706		28,040	1,065,107
2008	17,787	63,133	176,417	7	338,496	233,	233,586	104,931		61,973	996,323
2009	14,471	61,941	176,417	7	290,671	160,	160,225	90,181		104,311	898,217
2010	12,090	63,923	88,205	2	239,199	158,	158,016	107,463		103,778	772,673
Projected Increase	crease										
2011											1,039,932
2012											1,081,299
2013											1,122,666
2014											1,164,033
Average of I	Average of Projected Increase 2013 and 20	ase 2013 and	1 2014								1,143,349
-	0										0
Increase Ov	Increase Over 2010 Amount										3/0,6/6

Table	Cochise	EXD.	enses Over	the	Years and	Company's	Pro	Cochise - Expenses Over the Years and Company's Proforma Adjustment	stment			
		•										
	Acct.		Acct.	•	Acct.	Acct.	-	Acct.	Acct.		Acct.	
Year	6700		6701	_	6720	6730	-	6750	09/9		6770	Total
2000	\$ 12,961	<del>⇔</del> _	14,512	↔	25,668 \$	77,484	↔	76,145 \$	15,497	↔	1,097 \$	223,364
2001	11,458	~	16,427		25,668	77,436		73,840	18,428		2,000	225,256
2002	10,749	œ.	(1)		25,668	88,628		73,999	10,579		1,883	211,505
2003	12,211	_	18,779		25,668	113,634		82,408	16,956		1,107	270,763
2004	12,619	æ	23,192		34,893	114,559		87,035	23,271		1,578	297,147
2005	12,540	_	25,642		37,962	155,135		125,447	18,722		2,185	377,634
2006	12,869	œ.	24,352		37,962	130,727		94,440	15,061		2,716	318,127
2007	13,405	10	25,029		37,962	132,424		102,293	12,950		3,926	327,988
2008	13,101	_	26,564		37,962	132,654		111,332	17,266		4,754	343,634
2009	11,909	æ	24,492		37,962	128,713		90,297	16,396		946	310,715
2010	11,476	"	23,822		18,978	117,857		71,012	16,739		1,078	260,963
Projected Increase	crease											
2011												345,826
2012												355,477
2013												365,129
2014												374,780
Average of F	Projected Ir	ıcrea	Average of Projected Increase 2013 and 2014	1201	4							369,954
Increase Over 2010 Amount	er 2010 Am	ţuliot Tuliot										108 992
												200,001

Toble	Son Monito	ú	00000	the Ves	6	Su Combo	9,7,5	Evancation Over the Vegre and Company's Droforms Adjustment	-tuotation			
anie	Sali Mailuei		o caciladi	בו וופ ופס	2	ia compa	5 2	riologija r	unanine na			
	Acct		Acct	Acct.		Acct.		Acct.	Acct.		Acct.	
Year	6700	_	6701	6720		6730		6750	0929		6770	Total
2000	\$ 3,015	₩	4,580	\$ 9,024	↔	6,351	↔	13,570 \$	3 4,197	<del>69</del>	2,182 \$	42,919
2001	2,863		5,019	9,024		3,625		17,193	5,080		1,296	44,100
2002	3,131		5,385	9,024		6,974		18,723	2,918		1,069	47,224
2003	3,374		5,842	9,024		6,751		16,492	4,337		2,387	48,207
2004	3,219		7,630	5,850	_	4,288		14,892	5,126		156	41,160
2005	3,353		7,088	4,786		2,759		15,059	4,011		2,330	39,386
2006	3,620		7,698	4,786		6,338		23,958	4,233		1,206	51,838
2007	3,600		7,269	4,786		2,006		38,109	8,505		3,495	72,770
2008	3,465		6,110	4,786	<i>~</i>	12,931		23,924	2,980		491	54,687
2009	1,698		6,847	4,786	<b>.</b>	5,330		12,322	3,646		279	34,908
2010	666		7,016	2,392	٥.	4,496		11,896	6,307		188	33,294
Projected Increase	ıcrease											
2011												46,261
2012												46,237
2013												46,212
2014												46,188
Average of	Average of Projected Increase 2013 and 20	rease	2013 and 2	2014								46,200
Increase Ov	Increase Over 2010 Amount	unt										12,906
										ĺ		

Table I	Oracle - Ex	xpen	Oracle - Expenses Over the		ars and Cc	mpany's P	Įğ	Years and Company's Proforma Adjustment	ment			
	Acct.		Acct.	•	Acct.	Acct.		Acct.	Acct.		Acct.	
Year	6700		6701	J	6720	6730		6750	09/9		6770	Total
2000	\$ 2,586	↔	3,952	↔	8 098'9	5,354	↔	11,660 \$	3,615	↔	1,849 \$	35,376
2001	2,532		4,445		6,360	3,213		15,018	4,489		1,139	37,196
2002	2,799		4,967		6,360	6,200		16,709	2,595		954	40,583
2003	3,048		5,227		6,360	6,072		14,912	3,926		2,154	41,699
2004	2,959		7,011		13,704	3,937		13,666	4,698		143	46,116
2005	3,104		6,566		16,148	2,554		13,938	3,715		2,160	48,184
2006	3,403		7,241		16,148	6,937		22,562	3,985		1,134	61,410
2007	3,482		7,248		16,148	6,828		36,895	8,246		3,378	82,226
2008	3,439		6,458		16,148	12,839		23,764	3,504		486	66,638
2009	1,728		7,246		16,148	5,397		12,560	4,488		282	47,849
2010	1,028		5,551		8,106	2,607		12,848	7,013		985	41,139
Projected Increase	crease											
2011												63,271
2012												65,507
2013												67,742
2014												826,69
Average of Projected Increase 2013 and 20	Projected Inc	creas	e 2013 and	2014	<del></del>							68,860
Increase Over 2010 Amount	er 2010 Am	ount										27,721

Table I	Saddlebrooke Ranch - Expens	Ranch - Exp	o sesuec	ver the	Years and	ses Over the Years and Company's Proforma Adjustment	Profor	ma Adju	stment		
			•		,			,			
	Acct.	Acct.	Acct.	نِـ	Acct.	Acct.	1	Acct.	Acct.		
Year	00/9	6701	6720	o	6730	6750	9	0929	6770		Total
2000	\$ - \$	1	<del>69</del>	<del>⇔</del> '	•	ı \$>	ઝ	•	<del>S</del>	<b>⇔</b> '	•
2001	•	1		. 1	•	I		1			ı
2002	ı	i			•			•		•	ı
2003	1	1		ı	1	1		•		ı	1
2004	•	ı			•	1		1		•	i
2005	1	ı			•	ı		•		ı	1
2006	•	ı		ı	•	•		1		ı	ı
2007	19	33			9	214	4	56		19	401
2008	52	9/		•	144	27	<b>6</b>	0		2	556
2009		223			166	36	ഗ	21		တ	837
2010	58	299			200	62.	2	359		13	1,552
Projected Increase	ncrease										
2011											1,769
2012											2,142
2013											2,515
2014											2,889
Average of	Average of Projected Increase 2013 and 2014	ase 2013 an	d 2014								2,702
Increase O	Increase Over 2010 Amount	<b>#</b>									1,150

Table I	Winkleman -	Winkleman - Expenses Ove	ver the Years	r the Years and Company's Proforma Adjustment	's Proforma	diustment		
				-				
	Acct.	Acct.	Acct.	Acct.	Acct.	Acct.	Acct.	
Year	0029	6701	6720	6730	6750	6760	6770	Total
2000		\$ 530	\$ 672	\$ 719 \$	1,896	\$ 486 \$	\$ 250 \$	4,900
2001	343	601	672	435	2,091	909	155	4,903
2002	369	655	672	795	2,196	343	127	5,158
2003	380	652	672	758	1,857	487	269	5,076
2004	354	839	3,723	471	1,634	260	17	7,599
2005	361	765	4,743	299	1,622	429	248	8,467
2006	383	816	4,743	209	2,535	448	127	9,561
2007	390	813	4,743	756	4,131	924	379	12,135
2008	377	670	4,743	1,399	2,596	339	53	10,176
2009	184	772	4,743	574	1,328	410	30	8,041
2010	106	573	2,373	419	1,147	200	21	5,338
Projected Increase	ıcrease							
2011								9,898
2012								10,315
2013								10,732
2014								11,149
Average of	Average of Projected Increase 2013 and 2014	ease 2013 and	2014					10,941
Increase Ov	Increase Over 2010 Amount	ıt T						5,603

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Table II	<b>0</b> ,	Superstion -	ion - Selected Statistical Data	Data		
Year	Y-Interc	Y-Intercept or "b"	Change in Expenses per Year or "m"	R Squared	R	P-VALUE
11 YEAR	₩	584,895	\$ 41,367	60.46%	%91.71	0.48%
10 YEAR	₩	617,192	\$ 36,753	48.98%	%66.69	2.42%
9 YEAR	↔	666,400	\$ 30,043	33.78%	58.12%	10.07%
8 YEAR	↔	730,684	\$ 21,658	16.98%	41.21%	31.04%
7 YEAR	↔	873,921	\$ 3,753	0.57%	7.52%	87.27%
6 YEAR	↔	1,004,231	\$ (11,884)	4.09%	-20.22%	70.08%
5 YEAR	↔	1,341,384	\$ (50,786)	53.23%	-72.96%	16.18%
4 YEAR	↔	1,762,175	\$ (97,541)	98.33%	-99.16%	0.84%
3 YEAR	\$	1,895,495	\$ (111,825)	%09:66	-99.75%	4.50%

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Table II	3   	ochise - Se	Cochise - Selected Statistical Data	)ata		
Year	Y-Intercept or	pt or "b"	Change in Expenses per Year or "m"	es R Squared	æ	P-VALUE
11 YEAR	₩.	239,661	\$ 9,651	51 35.05%	59.21%	2.50%
10 YEAR	€	247,266	\$ 8,565	65 24.56%	49.55%	14.53%
9 YEAR	<del>⇔</del>	265,951	\$ 6,017	17 33.52%	33.52%	37.80%
8 YEAR	↔	320,560	\$ (1,106)	06) 0.51%	.7.13%	89.98
7 YEAR	↔	373,679	\$ (7,746)	46) 20.90%	45.71%	30.24%
6 YEAR	↔	449,594	\$ (16,856)	%99:99 (95	-81.65%	4.74%
5 YEAR	↔	417,567	\$ (13,160)	60) 44.41%	-66.64%	21.94%
4 YEAR	↔	509,722	\$ (23,400)	00) 70.98%	84.25%	15.75%
3 YEAR	\$	677,126	\$ (41,336)	36) 98.64%	-99.32%	7.45%

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Table II	Sa	n Manuel -	San Manuel - Selected Statistical Data	Data		
Year	Y-Intercept or "b"	ot or "b"	Change in Expenses per Year or "m"	R Squared	ж	P-VALUE
11 YEAR	₩.	46,531	\$ (25)	0.01%	-0.74%	98.27%
10 YEAR	↔	48,217	\$ (265)	0.49%	-7.01%	84.74%
9 YEAR	↔	50,571	\$ (586)	1.76%	-13.25%	73.39%
8 YEAR	↔	52,356	\$ (819)	) 2.40%	-15.49%	71.41%
7 YEAR	↔	54,290	\$ (1,061)	) 2.69%	-16.39%	72.54%
6 YEAR	<b>↔</b>	69,100	\$ (2,838)	12.42%	-35.25%	49.32%
5 YEAR	↔	109,459	\$ (7,495)	53.53%	-73.16%	16.00%
4 YEAR	<del>⇔</del>	166,390	\$ (13,821)	91.60%	-95.71%	4.29%
3 YEAR	\$	137,230	\$ (10,696)	80.62%	-89.79%	29.02%

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Table II	Oracle -	Selec	- Selected Statistical Data			
Year	Y-Intercept or "b"		Change in Expenses per Year or "m"	R Squared	æ	P-VALUE
11 YEAR	\$ 38,	8,677	\$ 2,236	26.41%	51.39%	10.59%
10 YEAR	\$ 40,	0,218	\$ 2,016	18.10%	42.55%	22.02%
9 YEAR	\$ 43,	3,296	\$ 1,596	9.37%	30.62%	42.30%
8 YEAR	\$ 48,	8,146	\$ 963	2.67%	16.34%	69.91%
7 YEAR	\$ 58,	8,817	\$ (371)	0.30%	-5.49%	%02'06
6 YEAR	\$ 29,	809'6	\$ (2,614)	10.34%	-32.15%	53.43%
5 YEAR	\$ 119,	9,787	\$ (7,492)	53.80%	-73.35%	15.84%
4 YEAR	\$ 180,	0,203	\$ (14,205)	%86.98	-98.48%	1.52%
3 YEAR	\$ 166,	6,617	\$ (12,749)	93.04%	-96.46%	17.00%

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Table II	SaddleBroo	SaddleBrooke Ranch - Selected Statistical Data	Statistical Data		
		Change in Expenses			
Year	Y-Intercept or "b"	per Year or "m"	R Squared	~	P-VALUE
11 YEAR	&	·	%00.0	0.00%	0.00%
10 YEAR	€	-	%00.0	0.00%	0.00%
9 YEAR	€	· •	%00.0	%00.0	0.00%
8 YEAR	€	· •	%00.0	%00.0	0.00%
7 YEAR	€	· •	%00.0	0.00%	0.00%
6 YEAR	€	· •	%00.0	%00.0	0.00%
5 YEAR	€	· •	%00.0	0.00%	%00.0
4 YEAR	\$ (2,335)	5) \$ 373	89.31%	94.51%	5.49%
3 YEAR	\$ (3,499)	9) \$ (6	94.03%	%26.96	15.72%

Appendix A page 12 of 13

Table II	Winkelman	Iman - Selected Statistical Data	ata		
Year	Y-Intercept or "b"	Change in Expenses per Year or "m"	R Squared	œ	P-VALUE
11 YEAR	\$ 5,311	\$ 417	30.11%	54.87%	8.05%
10 YEAR	\$ 5,502	\$ 390	22.10%	47.01%	17.04%
9 YEAR	\$ 6,106	\$ 307	11.72%	34.24%	36.71%
8 YEAR	\$ 7,390	\$ 140	2.07%	14.40%	73.36%
7 YEAR	\$ 10,515	\$ (251)	6.36%	-25.21%	58.55%
6 YEAR	\$ 13,703	\$ (633)	26.86%	-51.83%	29.22%
5 YEAR	\$ 19,082	\$ (1,254)	60.85%	-78.01%	11.96%
4 YEAR	\$ 28,069	\$ (2,253)	99.43%	-99.71%	0.29%
3 YEAR	\$ 29,621	\$ (2,419)	99.54%	-99.77%	4.31%

Appendix A, Page 13 of 13

Table III	Sup	erstition	- Actua	Superstition - Actual 2011 Expenses vs. Company predicted Expenses	(pen)	ses vs. C	ompa	ny pre	⇒dici	ted Exper	1se	<b>(</b> 0		,			
	Acct.	Acct.	; <del>,</del>	Acct.		Acct.	Acct.	ct.		Acct.		Acct.		Total	Company		
Year	6700	6701	=	6720	v	6730	6750	20		09/9		0229	1	Actual	Predicted	Diffe	Difference
2011	\$ 10,633	↔	58,916 \$	\$ 64,790	↔	690'62	90 \$	90,495	↔	108,864	↔	108,275	<del>⇔</del>	521,044	\$ 1,039,932	\$ (2	(518,888)
	Cochi	se - Act	ual 201	Cochise - Actual 2011 Expenses vs. Company predicted Expenses	es vs	. Compa	any pr	edicte	Ω̈́	cpenses							
	Acct.	Acct.	<u>ب</u> ر	Acct.		Acct.	Acct.	ct :		Acct.		Acct.		Total	Company		
Year	9200	6701	Ξ	6720	J	6730	6750	20		09/9		6770	1	Actual	Predicted		
2011	\$ 11,370	\$ 24,304	,304 \$	1	↔	1,433	↔	3,695	↔	38,869	↔	4,422	↔	84,093	\$ 345,826	\$ (26	(261,733)
	San N	lannel -	Actual	San Manuel - Actual 2011 Expe	ense	s vs. Co	mpany	/ pred	icte	penses vs. Company predicted Expenses	S <sub>S</sub>						
	Acct.	Acct.	<u>,,</u>	Acct.	`	Acct.	Acct.	당		Acct.		Acct.		Total	Company		
Year	00/9	6701	7	6720	v	6730	6750	20		09/9		6770	1	Actual	Predicted		
2011	\$ 967	↔	9,375 \$	87	↔	12,275	<del>(∙)</del>	3,242	↔	6,859	↔	109	↔	32,914	\$ 46,261	.) \$	(13,347)
	Oracle	e - Actua	1 2011	Oracle - Actual 2011 Expenses	s vs.	es vs. Company predicted Expenses	ıy preα	<b>licted</b>	Exp	enses							
	Acct.	Acct.	<del>,</del> ;	Acct.	_	Acct.	Acct.	당		Acct.		Acct.	ľ	Total	Company		
Year	6700	6701	Ξ	6720	v	6730	6750	20		09/9		0229	1	Actual	Predicted		
2011	\$ 995	↔	5,719 \$	-	↔	3,195	↔	4,182	↔	8,399	↔	112	<del>⇔</del>	22,601	\$ 63,271	<u>.</u>	(40,670)
	Saddl	ebrooke	Ranch	Saddlebrooke Ranch - Actual	2011	Expens	es vs.	Comp	any	2011 Expenses vs. Company predicted Expenses	μÜ	chenses					
	Acct.	Acct.	, <del>,</del>	Acct.		Acct.	Acct.	ಕ		Acct.		Acct.		Total	Company		
Year	00/9	6701	Ξ	6720	v	6730	9	6750		0929		6770	1	Actual	Predicted		
2011	86	<del>ss</del>	538 \$	,	↔	244	₽	301	↔	964	↔	7	↔	2,155	\$ 1,769	49	386
	Winke	lman - /	Actual 2	Winkelman - Actual 2011 Expe	enses vs.		npany	predi	cted	Company predicted Expenses	ပ္ခ်						
	Acct.	Acct.	<u>بر</u>	Acct.	`	Acct.	₹	Acct.		Acct.		Acct.		Total	Company		
Year	6700	6701	7	6720	J	6730	. 29	6750		0929		6770	1	Actual	Predicted		
2011	\$ 102	ઝ	230 \$	1	↔	257	↔	337	↔	790	↔	12	↔	2,087	\$ 9,898	s	(7,811)

# BEFORE THE ARIZONA CORPORATION COMMISSION

**GARY PIERCE** 

Chamman		
BOB STUMP		
Commissioner		
SANDRA D. KENNEDY		
Commissioner		
PAUL NEWMAN		
Commissioner		
BRENDA BURNS		
Commissioner		
		DOGWDDAYO WY 04445 . 44 0040
IN THE MATTER OF THE APPLICATION OF	)	DOCKET NO. W-01445A-11-0310
ARIZONA WATER COMPANY, AN ARIZONA	)	
CORPORATION, FOR A DETERMINATION	)	
OF THE FAIR VALUE OF ITS UTILITY	)	
PLANTS AND PROPERTY AND FOR	)	
INCREASES IN ITS WATER RATES AND	)	
CHARGES FOR UTILITY SERVICE BASED	)	
THEREON.	)	
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	<b>—</b> /	

(RATE DESIGN)

SURREBUTTAL

TESTIMONY

. OF

BENTLEY ERDWURM

CONSULTANT

**UTILITIES DIVISION** 

ARIZONA CORPORATION COMMISSION

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# EXECUTIVE SUMMARY ARIZONA WATER COMPANY, INC. DOCKET NO. W-01445A-11-0310

This testimony includes Staff recommendations for service areas in the Eastern portion of Arizona Water Company, Inc. ("Company") related to rate design and a normalization adjustment proposed by the Company related to use-per-customer. Staff's rate design recommendations conform to the revenue requirement recommendations of Staff witness Mr. Jeffery Michlik as presented in his Surrebuttal testimony in this preceding. The recommendations are consistent with the cost of providing service, and generally include an inclining block structure (with the exception of a flat structure for larger industrial customers (meters ≥6 inches) and sales for resale).

To provide additional options for the Commission, Staff proposes two sets of rate alternatives for consideration. Alternative 1 most closely follows the design approach presented by Staff in Direct Testimony. Alternative 2 has higher customer charges than Alternative 1. The Company has expressed a desire to recover a higher percentage of revenue through the customer charge (minimum monthly charge). Both alternatives make residential basic needs service available for a nominal charge and both designs promote the efficient use of scarce resources.

Staff modifies its position on the Company's proposed commercial use-per-customer adjustments applicable to the Superstition service area (Apache Junction, Superior and Miami). In Direct Testimony Staff recommended the rejection of all use-per-customer normalization adjustments because the Company's change in use-per-customer estimates – the basis for the normalization adjustments – typically are statistically unstable and vary with the time frame of the analysis (e.g. 10 year vs. 5 year). However, Staff acknowledges that when the adjustments are evaluated on a case-by-case basis, the Superstition-Commercial estimates are robust (consistent under different model formulations) and statistically significant. While Staff acknowledges the appropriateness of some commercial use-per-customer adjustment for the Superstition service area, Staff proposes a scaling-back of the Company's proposed adjustment.

### Summary of Impacts for Rate Alternatives:

### **ALTERNATIVE 1:**

For Superstition 5/8 x 3/4-inch meter residential customers with an average usage of 6,321 gallons would experience an increase of \$9.82, or a 29.0 percent increase in his/her monthly bill, from \$33.84 to \$43.66, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$1.01, or a 3.0 percent increase in his/her monthly bill, from \$33.84 to \$34.85.

For Superstition 5/8 x 3/4-inch meter residential customers with a median usage of 4,594 gallons would experience an increase of \$8.51, or a 29.4 percent increase in his/her monthly bill, from \$28.91 to \$37.42, under the Company's proposed rates. Under Staff's recommended rates,

the same customers would experience a decrease of \$0.29, or a 1.0 percent decrease in his/her monthly bill, from \$28.91 to \$28.62.

For Bisbee 5/8 x 3/4-inch meter residential customers with a with an average usage of 4,832 gallons would experience an increase of \$6.64, or a 20.5 percent increase in his/her monthly bill, from \$32.43 to \$39.07, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience a decrease of \$2.08, or a 6.4 percent decrease in his/her monthly bill, from \$32.43 to \$30.35.

For Bisbee 5/8 x 3/4-inch meter residential customers with a with a median usage of 3,308 gallons would experience an increase of \$6.64, or a 26.0 percent increase in his/her monthly bill, from \$25.56 to \$32.20, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience a decrease of \$2.58, or a 10.1 percent decrease in his/her monthly bill, from \$25.56 to \$22.98.

For Sierra Vista 5/8 x 3/4-inch meter residential customers with an average usage of 7,995 gallons would experience an increase of \$9.49, or a 36.6 percent increase in his/her monthly bill, from \$25.95 to \$35.44, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$1.70, or a 6.6 percent increase in his/her monthly bill, from \$25.95 to \$27.65.

For Sierra Vista 5/8 x 3/4-inch meter residential customers with a median usage of 5,610 gallons would experience an increase of \$8.57, or a 39.2 percent increase in his/her monthly bill, from \$21.89 to \$30.46, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$0.74, or a 3.4 percent increase in his/her monthly bill, from \$21.89 to \$22.63.

For San Manuel 5/8 x 3/4-inch meter residential customers with an average usage of 7,139 gallons would experience an increase of \$18.93, or a 43.4 percent increase in his/her monthly bill, from \$43.61 to \$62.54, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$3.45, or a 7.9 percent increase in his/her monthly bill, from \$43.61 to \$47.06.

For San Manuel 5/8 x 3/4-inch meter residential customers with a median usage of 5,426 gallons would experience an increase of \$14.36, or a 38.0 percent increase in his/her monthly bill, from \$37.82 to \$52.18, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$2.15, or a 5.7 percent increase in his/her monthly bill, from \$37.82 to \$39.97.

For Oracle 5/8 x 3/4-inch meter residential customers with an average usage of 5,140 gallons would experience an increase of \$7.40, or a 17.2 percent increase in his/her monthly bill, from \$43.05 to \$50.45, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience a decrease of \$0.61, or a 1.4 percent decrease in his/her monthly bill, from \$43.05 to \$42.44.

For Oracle 5/8 x 3/4-inch meter residential customers with a median usage of 3,958 gallons would experience an increase of \$6.30, or a 17.0 percent increase in his/her monthly bill, from \$37.00 to \$43.30, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience a decrease of \$1.04, or a 2.8 percent decrease in his/her monthly bill, from \$37.00 to \$35.96.

For SaddleBrooke Ranch 5/8 x 3/4-inch meter residential customers with an average usage of 3,405 gallons would experience an increase of \$11.00, or a 38.0 percent increase in his/her monthly bill, from \$28.96 to \$39.96, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$2.04, or a 7.0 percent increase in his/her monthly bill, from \$28.96 to \$31.00.

For SaddleBrooke Ranch 5/8 x 3/4-inch meter residential customers with a median usage of 2,567 gallons would experience an increase of \$9.89, or a 38.7 percent increase in his/her monthly bill, from \$25.53 to \$35.42, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$1.53, or a 6.0 percent increase in his/her monthly bill, from \$25.53 to \$27.06.

For Winkelman 5/8 x 3/4-inch meter residential customers with an average usage of 9,398 gallons would experience an increase of \$9.71, or a 31.6 percent increase in his/her monthly bill, from \$30.74 to \$40.45, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience a decrease of \$0.28, or a 0.9 percent decrease in his/her monthly bill, from \$30.74 to \$30.46.

For Winkelman  $5/8 \times 3/4$ -inch meter residential customers with a median usage of 6,635 gallons would experience an increase of \$7.96, or a 30.9 percent increase in his/her monthly bill, from \$25.75 to \$33.71, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience a decrease of \$0.63, or a 2.5 percent decrease in his/her monthly bill, from \$25.75 to \$25.12.

### **ALTERNATIVE 2:**

For Superstition 5/8 x 3/4-inch meter residential customers with an average usage of 6,321 gallons would experience an increase of \$9.82, or a 29.0 percent increase in his/her monthly bill, from \$33.84 to \$43.66, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$0.85, or a 2.5 percent increase in his/her monthly bill, from \$33.84 to \$34.69.

For Superstition 5/8 x 3/4-inch meter residential customers with a median usage of 4,594 gallons would experience an increase of \$8.51, or a 29.4 percent increase in his/her monthly bill, from \$28.91 to \$37.42, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$0.52, or a 1.8 percent increase in his/her monthly bill, from \$28.91 to \$29.43.

For Bisbee 5/8 x 3/4-inch meter residential customers with a with an average usage of 4,832 gallons would experience an increase of \$6.64, or a 20.5 percent increase in his/her

monthly bill, from \$32.43 to \$39.07, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience a decrease of \$2.03, or a 6.3 percent decrease in his/her monthly bill, from \$32.43 to \$30.40.

For Bisbee 5/8 x 3/4-inch meter residential customers with a with a median usage of 3,308 gallons would experience an increase of \$6.64, or a 26.0 percent increase in his/her monthly bill, from \$25.56 to \$32.20, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience a decrease of \$2.09, or an 8.2 percent decrease in his/her monthly bill, from \$25.56 to \$23.47.

For Sierra Vista 5/8 x 3/4-inch meter residential customers with an average usage of 7,995 gallons would experience an increase of \$9.49, or a 36.6 percent increase in his/her monthly bill, from \$25.95 to \$35.44, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$0.72, or a 2.8 percent increase in his/her monthly bill, from \$25.95 to \$26.67.

For Sierra Vista 5/8 x 3/4-inch meter residential customers with a median usage of 5,610 gallons would experience an increase of \$8.57, or a 39.2 percent increase in his/her monthly bill, from \$21.89 to \$30.46, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$0.55, or a 2.5 percent increase in his/her monthly bill, from \$21.89 to \$22.44.

For San Manuel 5/8 x 3/4-inch meter residential customers with an average usage of 7,139 gallons would experience an increase of \$18.93, or a 43.4 percent increase in his/her monthly bill, from \$43.61 to \$62.54, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$1.73, or a 4.0 percent increase in his/her monthly bill, from \$43.61 to \$45.34.

For San Manuel 5/8 x 3/4-inch meter residential customers with a median usage of 5,426 gallons would experience an increase of \$14.36, or a 38.0 percent increase in his/her monthly bill, from \$37.82 to \$52.18, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$0.74, or a 2.0 percent increase in his/her monthly bill, from \$37.82 to \$38.56.

For Oracle  $5/8 \times 3/4$ -inch meter residential customers with an average usage of 5,140 gallons would experience an increase of \$7.40, or a 17.2 percent increase in his/her monthly bill, from \$43.05 to \$50.45, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$0.47, or a 1.1 percent increase in his/her monthly bill, from \$43.05 to \$43.52.

For Oracle 5/8 x 3/4-inch meter residential customers with a median usage of 3,958 gallons would experience an increase of \$6.30, or a 17.0 percent increase in his/her monthly bill, from \$37.00 to \$43.30, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$0.24, or a 0.7 percent increase in his/her monthly bill, from \$37.00 to \$37.24.

For SaddleBrooke Ranch 5/8 x 3/4-inch meter residential customers with an average usage of 3,405 gallons would experience an increase of \$11.00, or a 38.0 percent increase in his/her monthly bill, from \$28.96 to \$39.96, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$3.41, or an 11.8 percent increase in his/her monthly bill, from \$28.96 to \$32.37.

For SaddleBrooke Ranch 5/8 x 3/4-inch meter residential customers with a median usage of 2,567 gallons would experience an increase of \$9.89, or a 38.7 percent increase in his/her monthly bill, from \$25.53 to \$35.42, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience an increase of \$3.08, or a 12.1 percent increase in his/her monthly bill, from \$25.53 to \$28.61.

For Winkelman 5/8 x 3/4-inch meter residential customers with an average usage of 9,398 gallons would experience an increase of \$9.71, or a 31.6 percent increase in his/her monthly bill, from \$30.74 to \$40.45, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience a decrease of \$0.78, or a 2.5 percent decrease in his/her monthly bill, from \$30.74 to \$29.96.

For Winkelman 5/8 x 3/4-inch meter residential customers with a median usage of 6,635 gallons would experience an increase of \$7.96, or a 30.9 percent increase in his/her monthly bill, from \$25.75 to \$33.71, under the Company's proposed rates. Under Staff's recommended rates, the same customers would experience a decrease of \$0.46, or a 1.8 percent decrease in his/her monthly bill, from \$25.75 to \$25.29.

Direct Testimony of Bentley Erdwurm Docket No. W-01445A-11-0310 Page 1

1

## INTRODUCTION

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I.

A.

Please state your name, occupation, and business address. Q.

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Commission ("ACC" or "Commission") in the Utilities Division ("Staff"). My business

My name is Bentley Erdwurm. I am a Consultant employed by the Arizona Corporation

address is 1200 West Washington Street, Phoenix, Arizona 85007.

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Did you prepare Direct prefiled testimony in this proceeding? Q.

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A. Yes.

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### What is the scope of your testimony in this case? Q.

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I am presenting Staff's analysis and recommendations regarding rate design as conformed Α.

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of Mr. Jeffery Michlik. Staff proposes two rate design recommendations, Alternative 1

to Staff's revenue requirement recommendation as presented in the surrebuttal testimony

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and Alternative 2. The Alternative 2 recommendations generally have higher customer

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charges (minimum monthly charges) than the Alternative 1 recommendations. I also

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address the Arizona Water Company's ("Company") normalization of billing determinates

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for trends in use-per-customer. Staff herein modifies its position on the Company's

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proposed commercial use-per-customer adjustments applicable to the Superstition service

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area (Apache Junction, Superior and Miami).

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### **RATE DESIGN** II.

22 Please describe the Alternative 1 and Alternative 2 rate design recommendations. Q.

Alternative 1 most closely follows the design approach presented by Staff in Direct

customers and to encourage efficient resource use, Staff in designing Alternative 1 has

To make a basic needs level of service available to system residential

limited both the customer charge and the charge for first tier (or block) consumption (1st

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Direct Testimony of Bentley Erdwurm Docket No. W-01445A-11-0310 Page 2

3000 gallons per month). This design mitigates impact on lower-use customers, including those with zero or negligible use. In designing Alternative 2, Staff has been most focused on mitigating the increase in the charge for first tier (or block) consumption (1st 3000 gallons per month). Alternative 2 has higher customer charges than Alternative 1. The goal of Alternative 2 is to mitigate percentage increases to customers with use at or slightly below mean and median levels. Customers with negligible or zero usage are atypical and are often seasonal residents. Alternative 2 does not seek to mitigate percentage bill increases to these extremely low-use customers because they will have small bills increases (in absolute rather than percentage terms) under any rate design.

Alternative 2 results in the customer charge (monthly minimum charge) accounting for a higher percentage of the bill. The Company has expressed a desire to recover a higher percentage of revenue through the customer charge. Both alternatives make residential basic needs service available for a nominal charge and both designs promote the efficient use of water.

## Q. Did Staff prepare typical bill analyses?

A. Yes. Schedule DBE-1 shows monthly bills under present rates, under Staff's Alternative 1 surrebuttal rate proposal and under Company-proposed rates for the various service areas in the Eastern portion of the Company's system.

## Q. Did Staff prepare a summary of its recommended rates?

A. Yes. Schedule DBE-2 presents Staff's Alternative 1 surrebuttal rate proposal, along with details on rate tiers (blocks).

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### O. Did Staff prepare analogous schedules for Staffs Alternative 2 recommended rates?

Yes. Schedule DBE-3 shows monthly bills under Staff's Alternative 2 Surrebuttal rate A. proposal and under Company-proposed rates for the various service areas in the Eastern portion of the Company's system. Schedule DBE-4 presents Staff's Alternative 2 Surrebuttal rate proposal, along with details on rate tiers (blocks).

May Alternative 1 rates be applied to some systems and Alternative 2 rates to Q. others?

A. In some cases, yes. For example, the Commission could accept an Alternative 1 proposal for Superstition and an Alternative 2 proposal for Bisbee. However, the same rate alternative should be used for Bisbee and Sierra Vista to facilitate future rate consolidation. Likewise, the same rate alternative should be used for San Manuel, Oracle, and SaddleBrooke Ranch.

### Did Staff reevaluate opportunities for rate consolidation? Q.

However, full consolidation of rates over the entire Eastern system remains impractical at this time, for the same reasons detailed in Staff's Direct testimony. Moving to consolidated rates would create large bill increases for customers on systems that have Apache Junction, Superior, and Miami are presently lower than average rates. consolidated for ratemaking purposes (as "Superstition"), and this consolidation was maintained in Staff's Direct and Surrebuttal rate recommendations. Staff previously has reviewed the possibility of consolidating Bisbee and Sierra Vista under uniform "Cochise" rates; however, customer impacts on Sierra Vista customers would have been too great. Bisbee and Sierra Vista presently have the same customer charge, a feature that was maintained in the Staff Direct and Alternative 1 Surrebuttal recommendations. The Company also did not propose full consolidation for Bisbee and Sierra Vista.

Staff continues to recommend maintaining San Manuel, SaddleBrooke Ranch and Oracle as stand-alone systems for rate making purposes at this time because of the adverse impacts to San Manuel and SaddleBrooke Ranch customers associated with consolidation. However, Staff believes that the Oracle and SaddleBrooke systems should eventually be fully consolidated since they are the same system. For this reason Staff has proposed identical commodity rates for SaddleBrooke and Oracle. Staff continues to recommend that Winkleman also be maintained as a stand-alone system at this time.

Q. Please briefly discuss the "normalization of billing determinates", which is based on the Company's estimation of annual growth/decline in usage per customer. Please explain the purpose of this adjustment.

A. This "normalization" is intended to adjust sales for trends in use-per-customer. In some cases, the Company has adjusted sales levels downward through this normalization process. This can result in higher rates because revenue requirement targets will be divided by reduced sales levels; the quotient (price) increases when a fraction's denominator (sales) falls, other things constant.

Q. Why is Staff modifying its recommendation on the Company's normalization of billing determinates for trends in use per customer?

A. In Staff's Direct Testimony, Staff recommended rejection of all normalization adjustments based on the Company's estimates of trends in use per customer. The adjustments are based on slope coefficients determined by statistical regression analysis. Many of the coefficients vary significantly when the analysis is conducted over varying time frames (e.g., ten vs. five years). Consequently, adjustments based on these unstable coefficients cannot be considered known and measurable. However, Staff acknowledges that when the adjustments are evaluated on a case-by-case basis, the Superstition-Commercial

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estimates are robust and statistically significant. Estimates are "robust" when they are consistent under different reasonable formulations of the statistical models (e.g., 10 years of data vs. 5 years of data, or different explanatory variables). The Superstition service area covers Apache Junction, Superior and Miami.

Q. For the Superstition commercial use-per-customer normalization adjustments, is Staff now recommending full acceptance of the approach proposed by the Company?

No. Staff proposes that the Company's adjustment be scaled back in two ways. First, Staff proposes a more conservative adjustment based on the upper bound of a 99 percent confidence interval constructed around the slope coefficient, rather on the more negative (larger in absolute value) slope coefficient itself. To put this into perspective, statistical modeling indicates that commercial use-per-customer is declining at 2.888 percent per year. The upper bound of the 99 percent confidence interval has a smaller absolute value and is more conservative. The commercial use-per-customer based on the upper bound of the confidence interval declines at only 1.002 percent per year. The 1.002 percent per year estimate means that based on water use and explanatory variables (explaining water use) with the magnitude and variation similar to the sample data, one expects that 99.5 percent of the time the decrease in water use per year will be at least 1.002 percent (0.5 percent -- only 1/2 of 1 percent -- of results are above the interval and 0.5 percent - 1/2 of 1 percent -- are below the interval).

The adjustments are further scaled back by multiplying by a factor of 71.58 percent, which represents the non-commodity portion of revenue. The adjustment should not apply to the commodity portion (the cost of the water commodity). Application of this factor reduces the Superstition commercial use-per-customer adjustment factor to a decrease of 0.717 Direct Testimony of Bentley Erdwurm Docket No. W-01445A-11-0310 Page 6

percent (i.e., approximately seven tenths of 1 percent, which is only 25 percent of the Company's proposed factor).

- Q. Have you confirmed that 2011 commercial Superstition sales have actually declined as predicted by the statistical models?
- A. Yes.

Q. Do you believe that Commission acceptance of a use-per-customer adjustment is in this instance in the public interest?

A. Yes. The public interest is bolstered when utilities face incentives that encourage them to support public policy objectives of eliminating the waste of scarce resources and encouraging the efficient use of these resources. To the extent possible, a utility should not be penalized for supporting a public policy goal that reduces its sales. The approach proposed by the Company, as modified by Staff, should be approved by the Commission for Superstition only. Staff continues to recommend rejection of the Company's other use-per-customer proposals (for the other systems).

- Q. Does this conclude your Direct Testimony?
- A. Yes, it does.

 Present

## **ALTERNATIVE 1**

Schedule DBE-1 Staff Proposed Page 1 of 7

Staff

Recommended

## Superstition / Apache Junction - Superior - Miami Typical Bill Analysis General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Change	Percent Change
Average Usage	6,321	\$33.84	\$43.66	\$ 9.82	29.02%
Median Usage	4,594	\$28.91	\$37.42	\$ 8.51	29.44%
Staff Recommended					
Average Usage	6,321	\$33.84	\$34.85	\$ 1.01	2.98%
Median Usage	4,594	\$28.91	\$28.62	\$ (0.29)	-1.00%

## Present & Proposed Rates (Without Taxes) General Service 5/8 x 3/4-Inch Meter

Company

Proposed

			•			
•	3/4"		3/4"		3/4"	
•	Minimum Charge \$	17.52	\$	23.00	\$	17.48
	1st Tier Rate	2.2820		2.8882		1.7930
	1st Tier Breakover	3,000		3,000		3,000
	2nd Tier Rate	2.8527		3.6103		3.6110
	2nd Tier Breakover	10,000		10,000		10,000
	3rd Tier Rate	3.5663		4.5129		5.5890
Consumption						
Gallons	Present Bill		Company Bill an	d % Change	Staff Bill and	% Change
-	\$17.52		\$23.00	31.28%	\$17.48	-0.23%
1,000	\$19.80		\$25.89	30.76%	\$19.27	-2.68%
2,000	\$22.08		\$28.78	30.34%	\$21.07	-4.57%
3,000	\$24.37		\$31.66	29.91%	\$22.86	-6.20%
4,000	\$27.22		\$35.27	29.57%	\$26.47	-2.76%
5,000	\$30.07		\$38.89	29.33%	\$30.08	0.03%
6,000	\$32.92		\$42.50	29.10%	\$33.69	2.34%
7,000	\$35.78		\$46.11	28.87%	\$37.30	4.25%
8,000	\$38.63		\$49.72	28.71%	\$40.91	5.90%
9,000	\$41.48		\$53.33	28.57%	\$44.53	7.35%
10,000	\$44.33		\$56.94	28.45%	\$48.14	8.59%
11,000	\$47.90		\$61.45	28.29%	\$53.73	12.17%
12,000	\$51.47		\$65.96	28.15%	\$59.31	15.23%
13,000	\$55.03		\$70.48	28.08%	\$64.90	17.94%
14,000	\$58.60		\$74.99	27.97%	\$70.49	20.29%
15,000	\$62.17		\$79.50	27.88%	\$76.08	22.37%
16,000	\$65.73		\$84.01	27.81%	\$81.67	24.25%
17,000	\$69.30		\$88.53	27.75%	\$87.26	25.92%
18,000	\$72.87		\$93.04	27.68%	\$92.85	27.42%
19,000	\$76.43		\$97.55	27.63%	\$98.44	28.80%
20,000	\$80.00		\$102.07	27.59%	\$104.03	30.04%
25,000	\$97.83		\$124.63	27.39%	\$131.97	34.90%
30,000	\$115.66		\$147.19	27.26%	\$159.92	38.27%
35,000	\$133.49		\$169.76	27.17%	\$187.86	40.73%
40,000	\$151.32		\$192.32	27.09%	\$215.81	42.62%
45,000	\$169.16		\$214.89	27.03%	\$243.75	44.09%
50,000	\$186.99		\$237.45	26.99%	\$271.70	45.30%
75,000	\$276.14		\$350.27	26.85%	\$411.42	48.99%
100,000	\$365.30		\$463.09	26.77%	\$551.15	50.88%

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## Cochise-Bisbee Typical Bill Analysis General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	resent Rates	posed Rates	_	Dollar hange	Percent Change
Average Usage	4,832	\$ 32.43	\$ 39.07	\$	6.64	20.47%
Median Usage	3,308	\$ 25.56	\$ 32.20	\$	6.64	25.98%
Staff Recommended	· <u>·····</u>	<del></del>				
Average Usage	4,832	\$ 32.43	\$ 30.35	\$	(2.08)	-6.41%
Median Usage	3,308	\$ 25.56	\$ 22.98	\$	(2.58)	-10.09%

		Company	Staff
	Present	Proposed	Recommended
	3/4"	3/4"	3/4"
	Minimum Charge \$ 13.36	\$ 20.0	
	1st Tier Rate 3.6039	3.603	
	1st Tier Breakover 3,000	3,000	500000000000000000000000000000000000000
	2nd Tier Rate 4.5049	4.504	0.0000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0
	2nd Tier Breakover 10,000	10,00	SUU SSSSCICTION TO SERVE OF SERVE
	3rd Tier Rate 5.6312	5.631	
Consumption		4004XX-999401010, 4.5-0402399-	2000 000 000 000 000 000 000 000 000 00
Gallons	Present Bill	Company Bill and % Chang	ge Staff Bill and % Change
-	\$13.36	\$20.00 49.70	% \$13.52 1.20%
1,000	\$16.96	\$23.60 39.15	% \$16.18 -4.60%
2,000	\$20.57	\$27.21 32.28	% \$18.83 -8.46%
3,000	\$24.17	\$30.81 27.47	% \$21.49 -11.09%
4,000	\$28.68	\$35.32 23.15	% \$26.33 -8.19%
5,000	\$33.18	\$39.82 20.01	% \$31.17 -6.06%
6,000	\$37.69	\$44.33 17.62	% \$36.01 -4.46%
7,000	\$42.19	\$48.83 15.74	% \$40.85 -3.18%
8,000	\$46.70	\$53.34 14.22	% \$45.69 -2.16%
9,000	\$51.20	\$57.84 12.97	% \$50.53 -1.31%
10,000	\$55.71	\$62.35 11.92	% \$55.37 -0.6 <b>1</b> %
11,000	\$61.34	\$67.98 10.82	% \$61.83 0.80%
12,000	\$66.97	\$73.61 9.91	% \$68.28 1.96%
13,000	\$72.60	\$79.24 9.15	% \$74.73 2.93%
14,000	\$78.23	\$84.87 8.49	<b>%</b> \$81.19 3.78%
15,000	\$83.86	\$90.50 7.92	% \$87.64 4.51%
16,000	\$89.49	\$96.13 7.42	<b>%</b> \$94.10 5.15%
17,000	\$95.12	\$101.76 6.98	<b>%</b> \$100.55 5.71%
18,000	\$100.76	\$107.39 6.58	% \$107.00 6.19%
19,000	\$106.39	\$113.03 6.24	<b>%</b> \$113.46 6.65%
20,000	\$112.02	\$118.66 5.93	% \$119.91 7.04%
25,000	\$140.17	\$146.81 4.74	<b>%</b> \$152.18 8.57%
30,000	\$168.33	\$174.97 3.94	% \$184.45 9.58%
35,000	\$196.49	\$203.12 3.37	
40,000	\$224.64	\$231.28 2.96	
45,000	\$252.80	\$259.43 2.62	•
50,000	\$280.95	\$287.59 2.36	
75,000	\$421.73	\$428.37 1.57	· ·
100,000	\$562.51	\$569.14 1.18	% \$636.23 13.11%

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## Cochise-Sierra Vista Typical Bill Analysis General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	resent Rates	posed lates	Dollar Change	Percent Change
Average Usage	7,995	\$ 25.95	\$ 35.44	\$ 9.49	36.57%
Median Usage	5,610	\$ 21.89	\$ 30.46	\$ 8.57	39.15%
Staff Recommended			 		
Average Usage	7,995	\$ 25.95	\$ 27.65	\$ 1.70	6.55%
Median Usage	5,610	\$ 21.89	\$ 22.63	\$ 0.74	3.38%

		Company			Staff
	Present	Proposed		Rec	ommended
	3/4"	3/4"		3/4"	
	Minimum Charge \$ 13.36	\$	20.00	\$	13.52
	1st Tier Rate 1.3626		1.6705		1.2070
	1st Tier Breakover 3,000		3,000		3,000
	2nd Tier Rate 1.7032		2.0881		2,1050
	2nd Tier Breakover 10,000		10,000		10,000
	3rd Tier Rate 2.1290	M. W.	2.6102		2.8960
Consumption					
Gallons	Present Bill	Company Bill and		Staff Bill and	
-	\$13.36	\$20.00	49.70%	\$13.52	1.20%
1,000	\$14.72	\$21.67	47.21%	\$14.73	0.07%
2,000	\$16.09	\$23.34	45.06%	\$15.93	-0.99%
3,000	\$17.45	\$25.01	43.32%	\$17.14	-1.78%
4,000	\$19.15	\$27.10	41.51%	\$19.25	0.52%
5,000	\$20.85	\$29.19	40.00%	\$21.35	2.40%
6,000	\$22.56	\$31.28	38.65%	\$23.46	3.99%
7,000	\$24.26	\$33.36	37.51%	\$25.56	5.36%
8,000	\$25.96	\$35.45	36.56%	\$27.67	6.59%
9,000	\$27.67	\$37.54	35.67%	\$29.77	7.59%
10,000	\$29.37	\$39.63	34.93%	\$31.88	8.55%
11,000	\$31.50	\$42.24	34.10%	\$34.77	10.38%
12,000	\$33.63	\$44.85	33.36%	\$37.67	12.01%
13,000	\$35.76	\$47.46	32.72%	\$40.56	13.42%
14,000	\$37.89	\$50.07	32.15%	\$43.46	14.70%
15,000	\$40.02	\$52.68	31.63%	\$46.36	15.84%
16,000	\$42.14	\$55.29	31.21%	\$49.25	16.87%
17,000	\$44.27	\$57.90	30.79%	\$52.15	17.80%
18,000	\$46.40	\$60.51	30.41%	\$55.04	18.62%
19,000	\$48.53	\$63.12	30.06%	\$57.94	19.39%
20,000	\$50.66	\$65.73	29.75%	\$60.84	20.09%
25,000	\$61.31	\$78.78	28.49%	\$75.32	22.85%
30,000	\$71.95	\$91.83	27.63%	\$89.80	24.81%
35,000	\$82.60	\$104.88	26.97%	\$104.28	26.25%
40,000	\$93.24	\$117.93	26.48%	\$118.76	27.37%
45,000	\$103.89	\$130.98	26.08%	\$133.24	28.25%
50,000	\$114.53	\$144.04	25.77%	\$147.72	28.98%
75,000	\$167.76	\$209.29	24.76%	\$220.12	31.21%
100,000	\$220.98	\$274.54	24.24%	\$292.52	32.37%

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## San Manuel Typical Bill Analysis General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	resent Rates	posed ates	Dollar Change	Percent Change
Average Usage	7,139	\$ 43.61	\$ 62.54	\$ 18.93	43.41%
Median Usage	5,426	\$ 37.82	\$ 52.18	\$ 14.36	37.97%
Staff Recommended	three controls and the controls and the controls and the control and the contr	 	 		
Average Usage	7,139	\$ 43.61	\$ 47.06	\$ 3.45	7.91%
Median Usage	5,426	\$ 37.82	\$ 39.97	\$ 2.15	5.68%

		Company			Staff
	Present	Proposed		Rec	ommended
	3/4"	3/4"		3/4"	
	Minimum Charge \$ 21.52	\$	23.00	\$	21.24
	1st Tier Rate 2.7022		4.8370		2.8960
	1st Tier Breakover 3,000		3,000		3,000
	2nd Tier Rate 3.3775	\$785 \$785	6.0462	1000	4.1390
	2nd Tier Breakover 10,000		10,000		10,000
	3rd Tier Rate 4.2221		7.5578		6.9120
Consumption					
Gallons	Present Bill	Company Bill and		Staff Bill and 9	6 Change
•	\$21.52	\$23.00	6.88%	\$21.24	-1.30%
1,000	\$24.22	\$27.84	14.95%	\$24.14	-0.33%
2,000	\$26.92	\$32.67	21.36%	\$27.03	0.41%
3,000	\$29.63	\$37.51	26.59%	\$29.93	1.01%
4,000	\$33.00	\$43.56	32.00%	\$34.07	3.24%
5,000	\$36.38	\$49.60	36.34%	\$38.21	5.03%
6,000	\$39.76	\$55.65	39.96%	\$42.35	6.51%
7,000	\$43.14	\$61.70	43.02%	\$46.48	7.74%
8,000	\$46.51	\$67.74	45.65%	\$50.62	8.84%
9,000	\$49.89	\$73.79	47.91%	\$54.76	9.76%
10,000	\$53.27	\$79.83	49.86%	\$58.90	10.57%
11,000	\$57.49	\$87.39	52.01%	\$65.81	14.47%
12,000	\$61.71	\$94.95	53.86%	\$72.73	17.86%
13,000	\$65.94	\$102.51	55.46%	\$79.64	20.78%
14,000	\$70.16	\$110.07	56.88%	\$86.55	23.36%
15,000	\$74.38	\$117.62	58.13%	\$93.46	25.65%
16,000	\$78.60	\$125.18	59.26%	\$100.37	27.70%
17,000	\$82.82	\$132.74	60.28%	\$107.29	29.55%
18,000	\$87.05	\$140.30	61.17%	\$114.20	31.19%
19,000	\$91.27	\$147.85	61.99%	\$121.11	32.69%
20,000	\$95.49	\$155.41	62.75%	\$128.02	34.07%
25,000	\$116.60	\$193.20	65.69%	\$162.58	39.43%
30,000	\$137.71	\$230.99	67.74%	\$197.14	43.16%
35,000	\$158.82	\$268.78	69.24%	\$231.70	45.89%
40,000	\$179.93	\$306.57	70.38%	\$266.26	47.98%
45,000	\$201.04	\$344.36	71.29%	\$300.82	49.63%
50,000	\$222.15	\$382.14	72.02%	\$335.38	50.97%
75,000	\$327.71	\$571.09	74.27%	\$508.18	55.07%
100,000	\$433.26	\$760.03	75.42%	\$680.98	57.18%

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## Oracle Typical Bill Analysis General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	resent Rates	posed ates	Dollar Change	Percent Change
Average Usage	5,140	\$ 43.05	\$ 50.45	\$ 7.40	17.19%
Median Usage	3,958	\$ 37.00	\$ 43.30	\$ 6.30	17.03%
Staff Recommended				 	
Average Usage	5,140	\$ 43.05	\$ 42.44	\$ (0.61)	-1.42%
Median Usage	3,958	\$ 37.00	\$ 35.96	\$ (1.04)	-2.81%

		Company			Staff
	Present	Proposed		Rec	ommended
	3/4"	3/4"	T	3/4"	<del></del>
	Minimum Charge \$ 19.83	\$	23.00	\$	18.83
	1st Tier Rate 4.0922		4.8370		3.9580
	1st Tier Breakover 3,000		3,000		3,000
	2nd Tier Rate 5.1151		6.0462		5.4850
	2nd Tier Breakover 10,000		10,000		10,000
	3rd Tier Rate 6.3938		7.5578		7.8120
Consumption	· · · · · · · · · · · · · · · · · · ·		•		
Gallons	Present Bill	Company Bill and	d % Change	Staff Bill and 9	6 Change
-	\$19.83	\$23.00	15.99%	\$18.83	-5.04%
1,000	\$23.92	\$27.84	16.39%	\$22.79	-4.72%
2,000	\$28.01	\$32.67	16.64%	\$26.75	-4.50%
3,000	\$32.11	\$37.51	16.82%	\$30.70	-4.39%
4,000	\$37.22	\$43.56	17.03%	\$36.19	-2.77%
5,000	\$42.34	\$49.60	17.15%	\$41.67	-1.58%
6,000	\$47.45	\$55.65	17.28%	\$47.16	-0.61%
7,000	\$52.57	\$61.70	17.37%	\$52.64	0.13%
8,000	\$57.68	\$67.74	17.44%	\$58.13	0.78%
9,000	\$62.80	\$73.79	17.50%	\$63.61	1.29%
10,000	\$67.91	\$79.83	17.55%	\$69.10	1.75%
11,000	\$74.31	\$87.39	17.60%	\$76.91	3.50%
12,000	\$80.70	\$94.95	17.66%	\$84.72	4.98%
13,000	\$87.09	\$102.51	17.71%	\$92.54	6.26%
14,000	\$93.49	\$110.07	17.73%	\$100.35	7.34%
15,000	\$99.88	\$117.62	17.76%	\$108.16	8.29%
16,000	\$106.28	\$125.18	17.78%	\$115.97	9.12%
17,000	\$112.67	\$132.74	17.81%	\$123.78	9.86%
18,000	\$119.06	\$140.30	17.84%	\$131.60	10.53%
19,000	\$125.46	\$147.85	17.85%	\$139.41	11.12%
20,000	\$131.85	\$155.41	17.87%	\$147.22	11.66%
25,000	\$163.82	\$193.20	17.93%	\$186.28	13.71%
30,000	\$195.79	\$230.99	17.98%	\$225.34	15.09%
35,000	\$227.76	\$268.78	18.01%	\$264.40	16.09%
40,000	\$259.73	\$306.57	18.03%	\$303.46	16.84%
45,000	\$291.70	\$344.36	18.05%	\$342.52	17.42%
50,000	\$323.66	\$382.14	18.07%	\$381.58	17.90%
75,000	\$483.51	\$571.09	18.11%	\$576.88	19.31%
100,000	\$643.35	\$760.03	18.14%	\$772.18	20.02%

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## SaddleBrooke Ranch Typical Bill Analysis General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	resent Rates	posed Rates	Dollar Change	Percent Change
Average Usage	3,405	\$ 28.96	\$ 39.96	\$ 11.00	37.98%
Median Usage	2,567	\$ 25.53	\$ 35.42	\$ 9.89	38.74%
Staff Recommended			·-	 	
Average Usage	3,405	\$ 28.96	\$ 31.00	\$ 2.04	7.04%
Median Usage	2,567	\$ 25.53	\$ 27.06	\$ 1.53	5.99%

	Present	Company Proposed		Rec	Staff ommended
	3/4"	3/4"		3/4"	
	Minimum Charge \$ 15.00	\$	23.00	Š	16.90
	1st Tier Rate 4,1000	T.	4.8370		3.9580
	1st Tier Breakover 3,000	70.0001	3,000		3,000
	2nd Tier Rate 4,1000		6.0462		5.4850
	2nd Tier Breakover 10,000		10,000		10,000
	3rd Tier Rate 4.1000		7.5578		7.8120
Consumption	Citt Fir Antwick Sections				A
Gallons	Present Bill	Company Bill and	d % Change	Staff Bill and S	% Change
•	\$15.00	\$23.00	53.33%	\$16.90	12.67%
1,000	\$19.10	\$27.84	45.76%	\$20.86	9.21%
2,000	\$23.20	\$32.67	40.82%	\$24.82	6.98%
3,000	\$27.30	\$37.51	37.40%	\$28.77	5.38%
4,000	\$31.40	\$43.56	38.73%	\$34.26	9.11%
5,000	\$35.50	\$49.60	39.72%	\$39.74	11.94%
6,000	\$39.60	\$55.65	40.53%	\$45.23	14.22%
7,000	\$43.70	\$61.70	41.19%	\$50.71	16.04%
8,000	\$47.80	\$67.74	41.72%	\$56.20	17.57%
9,000	\$51.90	\$73.79	42.18%	\$61.68	18.84%
10,000	\$56.00	\$79.83	42.55%	\$67.17	19.95%
11,000	\$60.10	\$87.39	45.41%	\$74.98	24.76%
12,000	\$64.20	\$94.95	47.90%	\$82.79	28.96%
13,000	\$68.30	\$102.51	50.09%	\$90.61	32.66%
14,000	\$72.40	\$110.07	52.03%	\$98.42	35.94%
15,000	\$76.50	\$117.62	53.75%	\$106.23	38.86%
16,000	\$80.60	\$125.18	55.31%	\$114.04	41.49%
17,000	\$84.70	\$132.74	56.72%	\$121.85	43.86%
18,000	\$88.80	\$140.30	58.00%	\$129.67	46.02%
19,000	\$92.90	\$147.85	59.15%	\$137.48	47.99%
20,000	\$97.00	\$155.41	60.22%	\$145.29	49.78%
25,000	\$117.50	\$193.20	64.43%	\$184.35	56.89%
30,000	\$138.00	\$230.99	67.38%	\$223.41	61.89%
35,000	\$158.50	\$268.78	69.58%	\$262.47	65.60%
40,000	\$179.00	\$306.57	71.27%	\$301.53	68.45%
45,000	\$199.50	\$344.36	72.61%	\$340.59	70.72%
50,000	\$220.00	\$382.14	73.70%	\$379.65	72.57%
75,000	\$322.50	\$571.09	77.08%	\$574.95	78.28%
100,000	\$425.00	\$760.03	78.83%	\$770.25	81.24%

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## Winkleman Typical Bill Analysis General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	resent Rates	posed ates	Dollar hange	Percent Change
Average Usage	9,398	\$ 30.74	\$ 40.45	\$ 9.71	31.59%
Median Usage	6,635	\$ 25.75	\$ 33.71	\$ 7.96	30.91%
Staff Recommended		 		 	
Average Usage	9,398	\$ 30.74	\$ 30.46	\$ (0.28)	-0.91%
Median Usage	6,635	\$ 25.75	\$ 25.12	\$ (0.63)	-2.45%

		Company			Staff
	Present	Proposed		Rec	ommended
	3/4"	3/4"		3/4"	
•	Minimum Charge \$ 14.84	\$	19.00	· \$	14.48
	1st Tier Rate 1.4458		1.9505		1.2070
	1st Tier Breakover 3,000		3,000		3,000
	2nd Tier Rate 1.8074		2.4381	3000	1.9310
	2nd Tier Breakover 10,000		10,000		10,000
	3rd Tier Rate 2.2595		3.0477		2.8960
Consumption					
Gallons	Present Bill	Company Bill and	1 % Change	Staff Bill and 9	% Change
•	\$14.84	\$19.00	28.03%	\$14.48	-2.43%
1,000	\$16.29	\$20.95	28.61%	\$15.69	-3.68%
2,000	\$17.73	\$22.90	29.16%	\$16.89	-4.74%
3,000	\$19.18	\$24.85	29.56%	\$18.10	-5.63%
4,000	\$20.98	\$27.29	30.08%	\$20.03	-4.53%
5,000	\$22.79	\$29.73	30.45%	\$21.96	-3.64%
6,000	\$24.60	\$32.17	30.77%	\$23.89	-2.89%
7,000	\$26.41	\$34.60	31.01%	\$25.83	-2.20%
8,000	\$28.21	\$37.04	31.30%	\$27.76	-1.60%
9,000	\$30.02	\$39.48	31.51%	\$29.69	-1.10%
10,000	\$31.83	\$41.92	31.70%	\$31.62	-0.66%
11,000	\$34.09	\$44.97	31.92%	\$34.51	1.23%
12,000	\$36.35	\$48.01	32.08%	\$37.41	2.92%
13,000	\$38.61	\$51.06	32.25%	\$40.31	4.40%
14,000	\$40.87	\$54.11	32.40%	\$43.20	5.70%
15,000	\$43.13	\$57.16	32.53%	\$46.10	6.89%
16,000	\$45.39	\$60.20	32.63%	\$48.99	7.93%
17,000	\$47.65	\$63.25	32.74%	\$51.89	8.90%
18,000	\$49.91	\$66.30	32.84%	\$54.79	9.78%
19,000	\$52.16	\$69.35	32.96%	\$57.68	10.58%
20,000	\$54.42	\$72.39	33.02%	\$60.58	11.32%
25,000	\$65.72	\$87.63	33.34%	\$75.06	14.21%
30,000	\$77.02	\$102.87	33.56%	\$89.54	16.26%
35,000	\$88.32	\$118.11	33.73%	\$104.02	17.78%
40,000	\$99.61	\$133.35	33.87%	\$118.50	18.96%
45,000	\$110.91	\$148.59	33.97%	\$132.98	19.90%
50,000	\$122.21	\$163.82	34.05%	\$147.46	20.66%
75,000	\$178.70	\$240.02	34.31%	\$219.86	23.03%
100,000	\$235.18	\$316.21	34.45%	\$292.26	24.27%

# **ALTERNATIVE 1**

Superstition		Staff Direct as Revised 03	ct as Rev		/22/2012	olcoo	Superstition		Staff Surrebuttal - Alternative	buttal - Alt	ernative 1	1	ol co
3 000 s	Minimum Charge	kes 3 18 10	\$ 18.10	5 24.14	Consul \$ 18.10	Aesale \$ 18.10	3.000	Minimum Charge	res 17.48	Comin \$ 17.48 \$	74.14 S		17.48
10,000	1st Tier Rate						10,000	1st Tier Rate	1.7930	<u>:</u>	! !	<u>!</u> :	
22,500	2nd Tier Rate	3.4780	3.4780	2.2890	3.4780	3.4780	22,500	2nd Tier Rate	3.6110	3.6110	2.2890	3.6110	3.6110
45,000							42,500						
70,000	3rd Tier Rate	5.3830	5.3830	2.9370	5.3830	3.4780	900'89	3rd Tier Rate	5.5890	5.5890	2.9370	5.5890	3.6110
140,000							135,000						
220,000							210,000						
450,000							425,000						
725,000 1,000,000							985,000 985,000						
Distract		Co begins of the second Party	0 70	- I	01000		Dicker		A Later of A Later of Super-	1 V 1 - 1 - 1	1		
pispee		Stall Dire	ct as Rev		7107/7		DISOCE		oran sarre	outtal - Alt	ernative 1		
Tiers		Res	Comm	tnd	Constr	Resale	Tiers		Res	Comm	lud	Constr	Resale
3,000	Minimum Charge	\$ 14.00	\$ 14.00	\$ 24.14	\$ 14.00	\$ 14.00	3,000	Minimum Charge	\$ 13.52	\$ 13.52 \$	24.14 \$	13.52 \$	13.52
10,000	1st Tier Rate	2.7500					10,000	1st Tier Rate	2.6550				
20,000	2nd Tier Rate	4.5000	4.5000	2.2890	4.5000	4.5000	20,000	2nd Tier Rate	4.8410	4.8410	2.2890	4.8410	4.8410
40,000							40,000						
000'59	3rd Tier Rate	9.0000	6.0000	2.9370	6.0000	0000.9	000'59	3rd Tier Rate	6.4540	6.4540	2.9370	6.4540	6.4540
140,000							130,000						
225,000							205,000						
450,000							412,500						
725,000							000'099						
1,000,000							000'056						
Sierra Vista		Staff Direct as Revised 03	ct as Rev		/22/2012		Sierra Vista		Staff Surre	Staff Surrebuttal - Alternative	ernative 1		
Tiers		Res	Comm	밀	Constr	Resale	Tiers		Res	Comm	pu	Constr	Resale
3,000	Minimum Charge	\$ 14.00	\$ 14.00	\$ 24.14	\$ 14.00	\$ 14.00	3,000		\$ 13.52	\$ 13.52	\$ 24.14 \$	13.52 \$	13.52
10,000	1st Tier Rate	1.2500					10,000		1.2070				
20,000	2nd Tier Rate	2.0000	2.0000	2.2890	2.0000	2.0000	20,000		2.1050	2.1050	2.2890	2.1050	2.1050
40,000						-	40,000						
65,000	3rd Tier Rate	2.7500	2.7500	2.9370	2.7500	2.7500	000′59		2.8960	2.8960	2.9370	2.8960	2.8960
140,000							130,000						
225,000							205,000						
450,000							412,500						
725,000							000'099						
1,000,000							000'056						

# **ALTERNATIVE 1**

		.035	d		0,000				950	-	:		ſ
san Manuel		Staff Direct as Revised U3	ct as kev		7707/77/		San Manuel		Staff Surrebuttal - Alternative	buttal - Alt	ternative 1		
Tiers		Res	Comm	Ind	Constr	Resale	Tiers		Res	Comm	Pul	Constr	Resale
3,000	Minimum Charge		\$ 22.00	\$ 24.14	\$ 22.00	\$ 22.00	3,000	Minimum Charge		\$ 21.24 \$	\$ 24.14 \$	21.24 \$	21.24
10,000	1st Tier Rate	3.0000					10,000	1st Tier Rate	2.8960				
21,000	2nd Tier Rate	4.0000	4.0000	2.2890	4.0000	4.0000	21,000	2nd Tier Rate	4.1390	4.1390	2.2890	4.1390	4.1390
40,000							39,500						
62,500	3rd Tier Rate	9.6800	0089.9	2.9370	9.6800	4.0000	61,000	3rd Tier Rate	6.9120	6.9120	2.9370	6.9120	4.1390
125,000							120,000						
197,500							185,000						
400,000							375,000						
645,000							000'009						
925,000							865,000						
Oracle		Staff Direct as Revised 03	ct as Rev		/22/2012		Oracle		Staff Surrebuttal - Alternative	buttal - Alt	ternative 1		
Tiers		Res	Comm	pu	Constr	Resale	Tiers		Res	Comm	lnd	Constr	Resale
3,000	Minimum Charge	Ö	\$ 19.50	\$ 24.14	_	\$ 19.50	3,000	Minimum Charge	83	\$ 18.83 \$			
10,000	1st Tier Rate	4.1000					10,000	1st Tier Rate					
21,000	2nd Tier Rate	5.1000	5.1000	2.2890	5.1000	5.1000	20,000	2nd Tier Rate	5.4850	5.4850	2.2890	5.4850	5.4850
40,000							35,000						
63,000	3rd Tier Rate	7.2500	7.2500	2.9370	7.2500	5.1000	25,000	3rd Tier Rate	7.8120	7.8120	2.9370	7.8120	5.4950
127,500							110,000						Ī
200,000							170,000						
400,000							345,000						
640,000							250,000						
000'006							800,000						
							-						
SaddleBrooke Ranch	anch	Staff Direct as Revised 03	ct as Rev	ised 03/2	3/22/2012		SaddleBrooke Ranch	anch	Staff Surrebuttal - Alternative	buttal - Alt	ternative 1		
Tiers		Res	Comm	밀	Constr	Resale	Tiers		Res	Comm	pul	Constr	Resale
3,000	Minimum Charge		\$ 17.50	\$ 24.14	\$ 17.50	\$ 17.50	3,000	Minimum Charge	\$ 16.90	\$ 16.90 \$	\$ 24.14	\$ 16.90 \$	16.90
10,000	1st Tier Rate	4.1000					10,000	1st Tier Rate	3.9580				
21,000	2nd Tier Rate	5.1000	5.1000	2.2890	5.1000	5.1000	20,000	2nd Tier Rate	5.4850	5.4850	2.2890	5.4850	5.4850
40,000							35,000						
63,000	3rd Tier Rate	7.2500	7.2500	2.9370	7.2500	5.1000	25,000	3rd Tier Rate	7.8120	7.8120	2.9370	7.8120	5.4950
127,500							110,000					:	
200,000							170,000						
400,000							345,000						
640,000							250,000						
000'006							800,000						
							-						

Arizona Water Company-Eastern Docket No. W-01445A-11-0310 Pricing and Tier Structure

Winkleman		Staff Direct as Revised 0	ect as Rev	/ised 03/	3/22/2012		<i>&gt;</i>	Ninkleman		Staff S	urrebu	ttal - Alt	staff Surrebuttal - Alternative 1	1	
Tiers		Res	Comm	<u>pu</u>	Constr	Resale		Tiers		Res	ŭ	Comm	pul	Constr	Resale
3,000	Minimum Charge	\$ 15.00 \$ 15.00 \$ 18.66 \$ 15.00 \$	\$ 15.00	\$ 18.66	\$ 15.00	\$ 15.00		3,000	Minimum Charge	\$ 14.	48 \$	14.48 \$	18.66	\$ 14.48 \$ 18.66 \$ 14.48 \$ 14.48	\$ 14.48
10,000	1st Tier Rate	1.2500						10,000	1st Tier Rate	1.20	1.2070				
30,000	2nd Tier Rate	2.0000	2.0000	1.7700	2.0000	2.0000		28,750	2nd Tier Rate	1.93		1.9310	1.7700	1.9310	1.9310
65,000								61,500							
100,000	3rd Tier Rate	3.0000	3.0000	2.2700	3.0000 3.0000 2.2700 3.0000	3.0000	, j	100,000	3rd Tier Rate	2.8960		2.8960	2.2700	2.8960	2.8960
200,000								200,000							
300,000								315,000							
000'059								640,000							
1,000,000								1,000,000							
1,500,000								1,450,000							

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Staff

Superstition / Apache Junction - Superior - Miami Typical Bill Analysis General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	Present Rates	Proposed Rates	Dollar Change	Percent Change
Average Usage	6,321	\$33.84	\$43.66	\$ 9.82	29.02%
Median Usage	4,594	\$28.91	\$37.42	\$ 8.51	29.44%
Staff Recommended				····	
Average Usage	6,321	\$33.84	\$34.69	\$ 0.85	2.51%
Median Usage	4,594	\$28.91	\$29.43	\$ 0.52	1.80%

## Present & Proposed Rates (Without Taxes) General Service 5/8 x 3/4-Inch Meter

Company

	Present	Proposed		Rec	ommended
	3/4"	3/4"		3/4"	
	Minimum Charge \$ 17.52	\$	23.00	\$	20.57
	1st Tier Rate 2.2820		2.8882		1.3350
	1st Tier Breakover 3,000		3,000		3,000
	2nd Tier Rate 2.8527		3.6103		3.0460
	2nd Tier Breakover 10,000		10,000		10,000
	3rd Tier Rate 3.5663	7,25	4.5129	- 44	5.3700
Consumption					
Gallons	Present Bill	Company Bill and	% Change	Staff Bill and 9	6 Change
•	\$17.52	\$23.00	31.28%	\$20.57	17.41%
1,000	\$19.80	\$25.89	30.76%	\$21.91	10.66%
2,000	\$22.08	\$28.78	30.34%	\$23.24	5.25%
3,000	\$24.37	\$31.66	29.91%	\$24.58	0.86%
4,000	\$27.22	\$35.27	29.57%	\$27.62	1.47%
5,000	\$30.07	\$38.89	29.33%	\$30.67	2.00%
6,000	\$32.92	\$42.50	29.10%	\$33.71	2.40%
7,000	\$35.78	\$46.11	28.87%	\$36.76	2.74%
8,000	\$38.63	\$49.72	28.71%	\$39.81	3.05%
9,000	\$41.48	\$53.33	28.57%	\$42.85	3.30%
10,000	\$44.33	\$56.94	28.45%	\$45.90	3.54%
11,000	\$47.90	\$61.45	28.29%	\$51.27	7.04%
12,000	\$51.47	\$65.96	28.15%	\$56.64	10.04%
13,000	\$55.03	\$70.48	28.08%	\$62.01	12.68%
14,000	\$58.60	\$74.99	27.97%	\$67.38	14.98%
15,000	\$62.17	\$79.50	27.88%	\$72.75	17.02%
16,000	\$65.73	\$84.01	27.81%	\$78.12	18.85%
17,000	\$69.30	\$88.53	27.75%	\$83.49	20.48%
18,000	\$72.87	\$93.04	27.68%	\$88.86	21.94%
19,000	\$76.43	\$97.55	27.63%	\$94.23	23.29%
20,000	\$80.00	\$102.07	27.59%	\$99.60	24.50%
25,000	\$97.83	\$124.63	27.39%	\$126.45	29.25%
30,000	\$115.66	\$147.19	27.26%	\$153.30	32.54%
35,000	\$133.49	\$169.76	27.17%	\$180.15	34.95%
40,000	\$151.32	\$192.32	27.09%	\$207.00	36.80%
45,000	\$169.16	\$214.89	27.03%	\$233.85	38.24%
50,000	\$186.99	\$237.45	26.99%	\$260.70	39.42%
75,000	\$276.14	\$350.27	26.85%	\$394.95	43.03%
100,000	\$365.30	\$463.09	26.77%	\$529.20	44.87%

Schedule DBE-3 Staff Proposed Page 2 of 7

## Cochise-Bisbee Typical Bill Analysis General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	resent Rates	posed ates	 ollar ange	Percent Change
Average Usage	4,832	\$ 32.43	\$ 39.07	\$ 6.64	20.47%
Median Usage	3,308	\$ 25.56	\$ 32.20	\$ 6.64	25.98%
Staff Recommended		 	 		,,, <u>, , , , , , , , , , , , , , , , , </u>
Average Usage	4,832	\$ 32.43	\$ 30.40	\$ (2.03)	-6.26%
Median Usage	3,308	\$ 25.56	\$ 23.47	\$ (2.09)	-8.18%

		Company			Staff
	Present	Proposed		Rec	ommended
	3/4"	3/4"		3/4"	
	Minimum Charge \$ 13.36	\$	20.00	\$	15.12
	1st Tier Rate 3.6039		3.6039		2.3180
	1st Tier Breakover 3,000		3,000		3,000
	2nd Tier Rate 4.5049	#1	4.5049	811	4.5450
	2nd Tier Breakover 10,000		10,000		10,000
	3rd Tier Rate 5.6312		5.6311		6.2610
Consumption	· · · · · · · · · · · · · · · · · · ·				
Gallons	Present Bill	Company Bill and	d % Change	Staff Bill and S	% Change
-	\$13.36	\$20.00	49.70%	\$15.12	13.17%
1,000	\$16.96	\$23.60	39.15%	\$17.44	2.83%
2,000	\$20.57	\$27.21	32.28%	\$19.76	-3.94%
3,000	\$24.17	\$30.81	27.47%	\$22.07	-8.69%
4,000	\$28.68	\$35.32	23.15%	\$26.62	-7.18%
5,000	\$33.18	\$39.82	20.01%	\$31.16	-6.09%
6,000	\$37.69	\$44.33	17.62%	\$35.71	-5.25%
7,000	\$42.19	\$48.83	15.74%	\$40.25	-4.60%
8,000	\$46.70	\$53.34	14.22%	\$44.80	-4.07%
9,000	\$51.20	\$57.84	12.97%	\$49.34	-3.63%
10,000	\$55.71	\$62.35	11.92%	\$53.89	-3.27%
11,000	\$61.34	\$67.98	10.82%	\$60.15	-1.94%
12,000	\$66.97	\$73.61	9.91%	\$66.41	-0.84%
13,000	\$72.60	\$79.24	9.15%	\$72.67	0.10%
14,000	\$78.23	\$84.87	8.49%	\$78.93	0.89%
15,000	\$83.86	\$90.50	7.92%	\$85.19	1.59%
16,000	\$89.49	\$96.13	7.42%	\$91.46	2.20%
17,000	\$95.12	\$101.76	6.98%	\$97.72	2.73%
18,000	\$100.76	\$107.39	6.58%	\$103.98	3.20%
19,000	\$106.39	\$113.03	6.24%	\$110.24	3.62%
20,000	\$112.02	\$118.66	5.93%	\$116.50	4.00%
25,000	\$140.17	\$146.81	4.74%	\$147.80	5.44%
30,000	\$168.33	\$174.97	3.94%	\$179.11	6.40%
35,000	\$196.49	\$203.12	3.37%	\$210.41	7.08%
40,000	\$224.64	\$231.28	2.96%	\$241.72	7.60%
45,000	\$252.80	\$259.43	2.62%	\$273.02	8.00%
50,000	\$280.95	\$287.59	2.36%	\$304.33	8.32%
75,000	\$421.73	\$428.37	1.57%	\$460.85	9.28%
100,000	\$562.51	\$569.14	1.18%	\$617.38	9.75%

Schedule DBE-3 Staff Proposed Page 3 of 7

## Cochise-Sierra Vista Typical Bill Analysis General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	esent lates		posed lates	Doll Char		Percent Change
Average Usage	7,995	\$ 25.95	\$	35.44	\$	9.49	36.57%
Median Usage	5,610	\$ 21.89	, \$	30.46	\$	8.57	39.15%
Staff Recommended		 					
Average Usage	7,995	\$ 25.95	\$	26.67	\$	0.72	2.77%
Median Usage	5,610	\$ 21.89	\$	22.44	\$	0.55	2.51%

		Company			Staff
	Present	Proposed		Rec	ommended
	3/4"	3/4"		3/4"	
	Minimum Charge \$ 13,36	\$	20.00	Š	14.55
	1st Tier Rate 1.3626		1.6705		1.0870
	1st Tier Breakover 3,000		3,000		3,000
	2nd Tier Rate 1.7032	***	2.0881		1.7730
	2nd Tier Breakover 10,000	,,,,,,,,,	10,000		10,000
	3rd Tier Rate 2.1290		2.6102		3.0550
Consumption			·		
Gallons	Present Bill	Company Bill and	l % Change	Staff Bill and	% Change
•	\$13.36	\$20.00	49.70%	\$14.55	8.91%
1,000	\$14.72	\$21.67	47.21%	\$15.64	6.25%
2,000	\$16.09	\$23.34	45.06%	\$16.72	3.92%
3,000	\$17.45	\$25.01	43.32%	\$17.81	2.06%
4,000	\$19.15	\$27.10	41.51%	\$19.58	2.25%
5,000	\$20.85	\$29.19	40.00%	\$21.36	2.45%
6,000	\$22.56	\$31.28	38.65%	\$23.13	2.53%
7,000	\$24.26	\$33.36	37.51%	\$24.90	2.64%
8,000	\$25.96	\$35.45	36.56%	\$26.68	2.77%
9,000	\$27.67	\$37.54	35.67%	\$28.45	2.82%
10,000	\$29.37	\$39.63	34.93%	\$30.22	2.89%
11,000	\$31.50	\$42.24	34.10%	\$33.28	5.65%
12,000	\$33.63	\$44.85	33.36%	\$36.33	8.03%
13,000	\$35.76	\$47.46	32.72%	\$39.39	10.15%
14,000	\$37.89	\$50.07	32.15%	\$42.44	12.01%
15,000	\$40.02	\$52.68	31.63%	\$45.50	13.69%
16,000	\$42.14	\$55.29	31.21%	\$48.55	15.21%
17,000	\$44.27	\$57.90	30.79%	\$51.61	16.58%
18,000	\$46.40	\$60.51	30.41%	\$54.66	17.80%
19,000	\$48.53	\$63.12	30.06%	\$57.72	18.94%
20,000	\$50.66	\$65.73	29.75%	\$60.77	19.96%
25,000	\$61.31	\$78.78	28.49%	\$76.05	24.04%
30,000	\$71.95	\$91.83	27.63%	\$91.32	26.92%
35,000	\$82.60	\$104.88	26.97%	\$106.60	29.06%
40,000	\$93.24	\$117.93	26.48%	\$121.87	30.71%
45,000	\$103.89	\$130.98	26.08%	\$137.15	32.01%
50,000	\$114.53	\$144.04	25.77%	\$152.42	33.08%
75,000	\$167.76	\$209.29	24.76%	\$228.80	36.39%
100,000	\$220.98	\$274.54	24.24%	\$305.17	38.10%

Schedule DBE-3 Staff Proposed Page 4 of 7

## San Manuel Typical Bill Analysis General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	resent Rates	posed lates	Dollar Change	Percent Change
Average Usage	7,139	\$ 43.61	\$ 62.54	\$ 18.93	43.41%
Median Usage	5,426	\$ 37.82	\$ 52.18	\$ 14.36	37.97%
Staff Recommended		 		 	
Average Usage	7,139	\$ 43.61	\$ 45.34	\$ 1.73	3.97%
Median Usage	5,426	\$ 37.82	\$ 38.56	\$ 0.74	1.96%

	Present		Company Proposed		Rec	Staff ommended
	3/4"	<u> </u>	3/4"	T	3/4"	
	Minimum Charge \$	21.52	Ś	23.00	Ś	22.21
	1st Tier Rate	2,7022	•	4.8370		2.2500
	1st Tier Breakover	3,000	Man en	3,000	. ***	3,000
	2nd Tier Rate	3.3775		6.0462		3.9580
	2nd Tier Breakover	10,000		10,000	******	10,000
	3rd Tier Rate	4.2221		7.5578		7.4740
Consumption	***************************************		20,000.0			
Gallons	Present Bill		Company Bill and	d % Change	Staff Bill and S	% Change
*	\$21.52		\$23.00	6.88%	\$22.21	3.21%
1,000	\$24.22		\$27.84	14.95%	\$24.46	0.99%
2,000	\$26.92		\$32.67	21.36%	\$26.71	-0.78%
3,000	\$29.63		\$37.51	26.59%	\$28.96	-2.26%
4,000	\$33.00		\$43.56	32.00%	\$32.92	-0.24%
5,000	\$36.38		\$49,60	36,34%	\$36.88	1,37%
6,000	\$39.76		\$55.65	39.96%	\$40.83	2.69%
7,000	\$43.14		\$61.70	43.02%	\$44.79	3.82%
8,000	\$46.51		\$67.74	45.65%	\$48.75	4.82%
9,000	\$49.89		\$73.79	47.91%	\$52.71	5.65%
10,000	\$53.27		\$79.83	49.86%	\$56.67	6.38%
11,000	\$57.49		\$87.39	52.01%	\$64.14	11.57%
12,000	\$61,71		\$94.95	53.86%	\$71.61	16.04%
13,000	\$65.94		\$102.51	55.46%	\$79.09	19.94%
14,000	\$70.16		\$110.07	56.88%	\$86.56	23.38%
15,000	\$74.38		\$117.62	58.13%	\$94.04	26.43%
16,000	\$78.60		\$125.18	59.26%	\$101.51	29.15%
17,000	\$82.82		\$132.74	60.28%	\$108.98	31.59%
18,000	\$87.05		\$140.30	61.17%	\$116.46	33.79%
19,000	\$91.27		\$147.85	61.99%	\$123.93	35.78%
20,000	\$95.49		\$155,41	62.75%	\$131.41	37.62%
25,000	\$116.60		\$193.20	65.69%	\$168.78	44.75%
30,000	\$137.71		\$230.99	67.74%	\$206.15	49.70%
35,000	\$158.82		\$268.78	69.24%	\$243.52	53.33%
40,000	\$179.93		\$306.57	70.38%	\$280.89	56.11%
45,000	\$201.04		\$344.36	71.29%	\$318.26	58.31%
50,000	\$222.15		\$382.14	72.02%	\$355.63	60.09%
75,000	\$327.71		\$571.09	74.27%	\$542.48	65.54%
100,000	\$433.26		\$760.03	75.42%	\$729.33	68.34%

Schedule DBE-3 Staff Proposed Page 5 of 7

## Oracle Typical Bill Analysis General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	 esent Rates	posed ates	Dollar hange	Percent Change
Average Usage	5,140	\$ 43.05	\$ 50.45	\$ 7.40	17.19%
Median Usage	3,958	\$ 37.00	\$ 43.30	\$ 6.30	17.03%
Staff Recommended	· · · · · · · · · · · · · · · · · · ·			 	
Average Usage	5,140	\$ 43.05	\$ 43.52	\$ 0.47	1.09%
Median Usage	3,958	\$ 37.00	\$ 37.24	\$ 0.24	0.65%

			Company			Staff
	Present		Proposed		Rec	ommended
	3/4"		3/4"		3/4"	
	Minimum Charge \$ 19.83		\$	23.00	\$	21.00
	1st Tier Rate 4.0922			4.8370		3.7170
	1st Tier Breakover 3,000			3,000		3,000
	2nd Tier Rate 5.1151			6.0462		5.3100
	2nd Tier Breakover 10,000			10,000		10,000
	3rd Tier Rate 6.3938			7.5578		7,0010
Consumption						
Gallons	Present Bill		Company Bill and		Staff Bill and 9	
•	\$19.83		\$23.00	15.99%	\$21.00	5.90%
1,000	\$23.92		\$27.84	16.39%	\$24.72	3.34%
2,000	\$28.01		\$32.67	16.64%	\$28.43	1.50%
3,000	\$32.11		\$37.51	16.82%	\$32.15	0.12%
4,000	\$37.22		\$43.56	17.03%	\$37.46	0.64%
5,000	\$42.34	\$7.27	\$49.60	17.15%	\$42.77	1.02%
6,000	\$47.45		\$55.65	17.28%	\$48.08	1.33%
7,000	\$52.57		\$61.70	17.37%	\$53.39	1.56%
8,000	\$57.68		\$67.74	17.44%	\$58.70	1.77%
9,000	\$62.80		\$73.79	17.50%	\$64.01	1.93%
10,000	\$67.91		\$79.83	17.55%	\$69.32	2.08%
11,000	\$74.31		\$87.39	17.60%	\$76.32	2.70%
12,000	\$80.70		\$94.95	17.66%	\$83.32	3.25%
13,000	\$87.09		\$102.51	17.71%	\$90.32	3.71%
14,000	\$93.49		\$110.07	17.73%	\$97.33	4.11%
15,000	\$99.88		\$117.62	17.76%	\$104.33	4.46%
16,000	\$106.28		\$125.18	17.78%	\$111.33	4.75%
17,000	\$112.67		\$132.74	17.81%	\$118.33	5.02%
18,000	\$119.06		\$140.30	17.84%	\$125.33	5.27%
19,000	\$125.46		\$147.85	17.85%	\$132.33	5.48%
20,000	\$131.85		\$155.41	17.87%	\$139.33	5.67%
25,000	\$163.82		\$193.20	17.93%	\$174.34	6.42%
30,000	\$195.79	1	\$230.99	17.98%	\$209.34	6.92%
35,000	\$227.76		\$268.78	18.01%	\$244.35	7.28%
40,000	\$259.73		\$306.57	18.03%	\$279.35	7.55%
45,000	\$291.70		\$344.36	18.05%	\$314.36	7.77%
50,000	\$323.66		\$382.14	18.07%	\$349.36	7.94%
75,000	\$483.51		\$571.09	18.11%	\$524.39	8.45%
100,000	\$643.35	į	\$760.03	18.14%	\$699.41	8.71%

Schedule DBE-3 Staff Proposed Page 6 of 7

## SaddleBrooke Ranch Typical Bill Analysis General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	resent Rates	posed lates	Dollar Change	Percent Change
Average Usage	3,405	\$ 28.96	\$ 39.96	\$ 11.00	37.98%
Median Usage	2,567	\$ 25.53	\$ 35.42	\$ 9.89	38.74%
Staff Recommended		 	 	 	
Average Usage	3,405	\$ 28.96	\$ 32.37	\$ 3.41	11.77%
Median Usage	2,567	\$ 25.53	\$ 28.61	\$ 3.08	12.06%

			Company			Staff
	Present		Proposed		Red	ommended
_	3/4"		3/4"	T	3/4"	, , , , , , , , , , , , , , , , , , , ,
_	Minimum Charge \$	15.00		23.00	\$	19.07
	1st Tier Rate	4.1000	155 855	4.8370		3.7170
	1st Tier Breakover	3,000		3,000		3,000
	2nd Tier Rate	4.1000		6.0462		5.3100
	2nd Tier Breakover	10,000	397-00	10,000		10,000
	3rd Tier Rate	4.1000		7.5578		7.0010
Consumption			4800			11 1
Gallons	Present Bill		Company Bill ar	nd % Change	Staff Bill and	% Change
•	\$15.00		\$23.00	53.33%	\$19.07	27.13%
1,000	\$19.10		\$27.84	45.76%	\$22.79	19.32%
2,000	\$23.20		\$32.67	40.82%	\$26.50	14.22%
3,000	\$27.30		\$37.51	37.40%	\$30.22	10.70%
4,000	\$31.40		\$43.56	38.73%	\$35.53	13.15%
5,000	\$35.50		\$49.60	39.72%	\$40.84	15.04%
6,000	\$39.60		\$55.65	40.53%	\$46.15	16.54%
7,000	\$43.70		\$61.70	41.19%	\$51.46	17.76%
8,000	\$47.80		\$67.74	41.72%	\$56.77	18.77%
9,000	\$51.90		\$73.79	42.18%	\$62.08	19.61%
10,000	\$56.00		\$79.83	42.55%	\$67.39	20.34%
11,000	\$60.10		\$87.39	45.41%	\$74.39	23.78%
12,000	\$64.20		\$94.95	47.90%	\$81.39	26.78%
13,000	\$68.30		\$102.51	50.09%	\$88.39	29.41%
14,000	\$72.40		\$110.07	52.03%	\$95.40	31.77%
15,000	\$76.50		\$117.62	53.75%	\$102.40	33.86%
16,000	\$80.60		\$125.18	55.31%	\$109.40	35.73%
17,000	\$84.70		\$132.74	56.72%	\$116.40	37.43%
18,000	\$88.80		\$140.30	58.00%	\$123.40	38.96%
19,000	\$92.90		\$147.85	59.15%	\$130.40	40.37%
20,000	\$97.00		\$155.41	60.22%	\$137.40	41.65%
25,000	\$117.50		\$193.20	64.43%	\$172.41	46.73%
30,000	\$138.00		\$230.99	67.38%	\$207.41	50.30%
35,000	\$158.50		\$268.78	69.58%	\$242.42	52.95%
40,000	\$179.00		\$306.57	71.27%	\$277.42	54.98%
45,000	\$199.50		\$344.36	72.61%	\$312.43	56.61%
50,000	\$220.00		\$382.14	73.70%	\$347.43	57.92%
75,000	\$322.50		\$571.09	77.08%	\$522.46	62.00%
100,000	\$425.00		\$760.03	78.83%	\$697.48	64.11%

Schedule DBE-3 Staff Proposed Page 7 of 7

## Winkleman Typical Bill Analysis General Service 5/8 x 3/4-Inch Meter

Company Proposed	Gallons	-	resent Rates	oposed Rates	Dollar :hange	Percent Change
Average Usage	9,398	\$	30.74	\$ 40.45	\$ 9.71	31.59%
Median Usage	6,635	\$	25.75	\$ 33.71	\$ 7.96	30.91%
Staff Recommended				 		
Average Usage	9,398	\$	30.74	\$ 29.96	\$ (0.78)	-2.54%
Median Usage	6,635	\$	25.75	\$ 25.29	\$ (0.46)	-1.79%

	Present	Company Proposed		Reco	Staff ommended
	3/4"	3/4"		3/4"	
•	Minimum Charge \$ 14.84	\$	19.00	s	15.93
	1st Tier Rate 1.4458	*	1.9505		1,0720
	1st Tier Breakover 3,000	9,69,000	3,000	10.000	3,000
	2nd Tier Rate 1.8074		2.4381		1.6900
	2nd Tier Breakover 10,000		10,000		10,000
	3rd Tier Rate 2.2595		3.0477		2.8970
Consumption	मान्यविद्यालक्षः स्वानस्थानम् ।		minimum - a Cognitive)	1911	
Gallons	Present Bill	Company Bill and	d % Change	Staff Bill and 9	6 Change
•	\$14.84	\$19.00	28.03%	\$15.93	7.35%
1,000	\$16.29	\$20.95	28.61%	\$17.00	4.36%
2,000	\$17.73	\$22.90	29.16%	\$18.07	1.92%
3,000	\$19.18	\$24.85	29.56%	\$19.15	-0.16%
4,000	\$20.98	\$27.29	30.08%	\$20.84	-0.67%
5,000	\$22.79	\$29.73	30.45%	\$22.53	-1.14%
6,000	\$24.60	\$32.17	30.77%	\$24.22	-1.54%
7,000	\$26.41	\$34.60	31.01%	\$25.91	-1.89%
8,000	\$28.21	\$37.04	31.30%	\$27.60	-2.16%
9,000	\$30.02	\$39.48	31.51%	\$29.29	-2.43%
10,000	\$31.83	\$41.92	31.70%	\$30.98	-2.67%
11,000	\$34.09	\$44.97	31.92%	\$33.87	-0.65%
12,000	\$36.35	\$48.01	32.08%	\$36.77	1.16%
13,000	\$38.61	\$51.06	32.25%	\$39.67	2.75%
14,000	\$40.87	\$54.11	32.40%	\$42.56	4.14%
15,000	\$43.13	\$57.16	32.53%	\$45.46	5.40%
16,000	\$45.39	\$60.20	32.63%	\$48.36	6.54%
17,000	\$47.65	\$63.25	32.74%	\$51.26	7.58%
18,000	\$49.91	\$66.30	32.84%	\$54.15	8.50%
19,000	\$52.16	\$69.35	32.96%	\$57.05	9.38%
20,000	\$54.42	\$72.39	33.02%	\$59.95	10.16%
25,000	\$65.72	\$87.63	33.34%	\$74.43	13.25%
30,000	\$77.02	\$102.87	33.56%	\$88.92	15.45%
35,000	\$88.32	\$118.11	33.73%	\$103.40	17.07%
40,000	\$99.61	\$133.35	33.87%	\$117.89	18.35%
45,000	\$110.91	\$148.59	33.97%	\$132.37	19.35%
50,000	\$122.21	\$163.82	34.05%	\$146.86	20.17%
75,000	\$178.70	\$240.02	34.31%	\$219.28	22.71%
100,000	\$235.18	\$316.21	34.45%	\$291.71	24.04%

# **ALTERNATIVE 2**

\ \ \ \ \	rnative 2 Ind Constr Resale 24.14 \$ 15.12 \$ 15.12 2.2890    4.5450    4.5450 2.9370    6.2610    6.2610  24.14 \$ 14.55 \$ 14.55 2.2890    1.7730    1.7730 2.9370    3.0550	
Staff Surrebuttal - Alternative  Res Comm Ind \$ 20.57 \$ 20.57 \$ 24.14  1.3350 3.0460 3.0460 2.2890 5.3700 5.3700 2.9370	Staff Surrebuttal - Alternative Res Comm Ind 2.3180 4.5450 4.5450 2.2890 6.2610 6.2610 2.9370 6.2610 6.2610 2.9370 1.0870 1.7730 1.7730 2.2890 3.0550 3.0550 2.9370	
Minimum Charge 1st Tier Rate 2nd Tier Rate 3rd Tier Rate	Minimum Charge 1st Tier Rate 2nd Tier Rate 3rd Tier Rate	
Superstition Tiers 3,000 10,000 22,500 44,500 70,000 140,000 217,500 435,000 699,999	Bisbee  Tiers 3,000 10,000 20,000 40,000 65,000 138,750 222,500 450,000 1,000 20,000 10,000 20,000 40,000 65,000 138,750 222,500 450,000 138,750 725,000 138,750 725,000 138,750 725,000 138,750 725,000 725,000	
Resale \$ 18.10 3.4780 3.4780	Resale \$ 14.00 4.5000 6.0000 2.0000 2.7500	
- %		
(22/2012 Constr   1 \$ 18.10 \$ 3.4780 5.3830	/22/2012 Constr 1 \$ 14.00 \$ 0 4.5000 Constr 1 \$ 14.00 \$ 0 2.0000	
(22/2012 Constr   1 \$ 18.10 \$ 3.4780 5.3830	/22/2012 Constr 1 \$ 14.00 \$ 0 4.5000 Constr 1 \$ 14.00 \$ 0 2.0000	
vised 03/22/2012 Ind Constr   \$ 24.14 \$ 18.10 \$ 2.2890 3.4780 2.9370 5.3830	as Revised 03/22/2012  omm Ind Constr F 14.00 \$ 24.14 \$ 14.00 \$ 15.000 2.2890 4.5000  S.0000 2.9370 6.0000  S.0000 2.2890 2.0000  S.0000 2.2890 2.0000  S.7500 2.9370 2.7500	
(22/2012 Constr   1 \$ 18.10 \$ 3.4780 5.3830	/22/2012 Constr 1 \$ 14.00 \$ 0 4.5000 Constr 1 \$ 14.00 \$ 0 2.0000	

# **ALTERNATIVE 2**

San Manuel		Staff Direct as Revised 03	rt as Rev		27/2012		San Manuel		Staff Surrebuttal - Alternative	hittal - Alt	ernative 2		
Tiers		200	בר מס ווכר		Constr	Bocolo	Tierc		Bos unio	מתנקו שוני	מין וומיואר א	Constr	Docolo
3,000	Minimum Charge	چ	22.00	\$ 24.14	\$ 22.00	22.00	3.000	Minimum Charge	7	\$ 22.21 \$			
10,000	1st Tier Rate	3.0000					10,000	1st Tier Rate	2.2500				
21,000	2nd Tier Rate	4.0000	4.0000	2.2890	4.0000	4.0000	21,000	2nd Tier Rate	3.9580	3.9580	2.2890	3.9580	3.9580
40,000							40,000						
62,500	3rd Tier Rate	0.6800	6.6800	2.9370	9.6800	4.0000	62,500	3rd Tier Rate	7.4740	7.4740	2.9370	7.4740	3.9590
125,000							125,000						
197,500							400,000						
645,000							645,000						
Oracle		Staff Direct as Revised 03	ct as Rev		/22/2012		Oracle		Staff Surrebuttal - Alternative	buttal - Alt	ernative 2		
Tiers		Res	Comm	Ind	Constr	Resale	Tiers		Res	Comm	lud	Constr	Resale
3,000	Minimum Charge	\$ 19.50	\$ 19.50	\$ 24.14	\$ 19.50	\$ 19.50	3,000	Minimum Charge	\$ 21.00	\$ 21.00 \$	24.14 \$	21.00 \$	21.00
10,000	1st Tier Rate	4.1000					10,000	1st Tier Rate	3.7170				
21,000	2nd Tier Rate	5.1000	5.1000	2.2890	5.1000	5.1000	21,000	2nd Tier Rate	5.3100	5.3100	2.2890	5.3100	5.3100
40,000							40,000						
63,000	3rd Tier Rate	7.2500	7.2500	2.9370	7.2500	5.1000	93,000	3rd Tier Rate	7.0010	7.0010	2.9370	7.0010	5.3110
127,500							127,500						
200,000							200,000						
400,000							400,000						
640,000							640,000						
000'006							000'006						
SaddleBrooke Ranch	anch	Staff Direct as Revised 03	ct as Rev		/22/2012		SaddleBrooke Ranch	lanch	Staff Surrebuttal - Alternative	buttal - Alt	ernative 2		
Tiers		Res	Comm	pu L	Constr	Resale	Tiers		Res	Comm	pu	Constr	Resale
3,000	Minimum Charge	0	\$ 17.50	\$ 24.14	\$ 17.50	\$ 17.50	3,000	Minimum Charge	02	\$ 19.07 \$		19.07	\$ 19.07
10,000	1st Tier Rate	4.1000					10,000	1st Tier Rate	3.7170				
21,000	2nd Tier Rate	5.1000	5.1000	2.2890	5.1000	5.1000	21,000	2nd Tier Rate	5.3100	5.3100	2.2890	5.3100	5.3100
40,000							40,000						
63,000	3rd Tier Rate	7.2500	7.2500	2.9370	7.2500	5.1000	000′£9	3rd Tier Rate	7.0010	7.0010	2.9370	7.0010	5.3110
127,500							127,500						
200,000							200,000						
400,000							400,000						
640,000							000,000						
900,006							000,008						

## **ALTERNATIVE 2**

									•				
Winkleman		Staff Dire	× ×	ised 03/2	2/2012		Winkleman	man		Staff Surrebuttal - Alternative 2	outtal - Al	ternative	2
Tiers		Res		Ind	Comm Ind Constr	Resale		Tiers		Res	Comm	lud	S
3,000	Minimum Charge	\$ 15.00		\$ 18.66	\$ 15.00 \$ 18.66 \$ 15.00 \$ 15.00	\$ 15.00		3,000	Minimum Charge	\$ 15.93 \$	\$ 15.93 \$ 18.66 \$ 1	\$ 18.66	\$
10,000	1st Tier Rate	1.2500						10,000	1st Tier Rate	1.0720			
30,000	2nd Tier Rate	2.0000	2.0000	1.7700	2.0000	2.0000		28,750	2nd Tier Rate	1.6900	1.6900	1.7700	1.6
62,000								61,500					
100,000	3rd Tier Rate	3.0000	3.0000	2.2700	2.2700 3.0000	3.0000	•	100,000	3rd Tier Rate	2.8970	2.8970	2.2700	7.8
200,000							••	200,000					
300,000								315,000					
000'059							ŭ	540,000					
1,000,000							1,(	000'000					
1,500,000							1,1	.,450,000					

2.8970

1.7700 1.6900 1.6900 2.8970